

**ACCULTURATION AND QUALITY OF LIFE OF CHINESE MAINLAND
STUDENTS IN NORTHERN B.C.**

by

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Abstract

This study used a quantitative method to explore the acculturation process and quality of life of Chinese Mainland students in Prince George in Northern B.C. It mainly focuses on the effect of residence time on acculturation and quality of life, as well as gender differences in these two aspects among the study subjects. U-curve of adjustment theory (UCT) served as the conceptual framework. Chinese Mainland students who are currently studying in Northern B.C. were recruited to complete a 40-question survey (N = 95). Results indicated that participants showed a semi-“U” shape cultural adaptation process. However, no significant difference was found between the two genders on acculturation. The findings also demonstrated that the students’ quality of life correlates to their acculturation level. Despite no difference in acculturation between males and females, they do significantly differ on quality of life in terms of psychological health and social connectivity.

Key words: acculturation, quality of life, Chinese mainland student, UCT

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Chapter One: Introduction

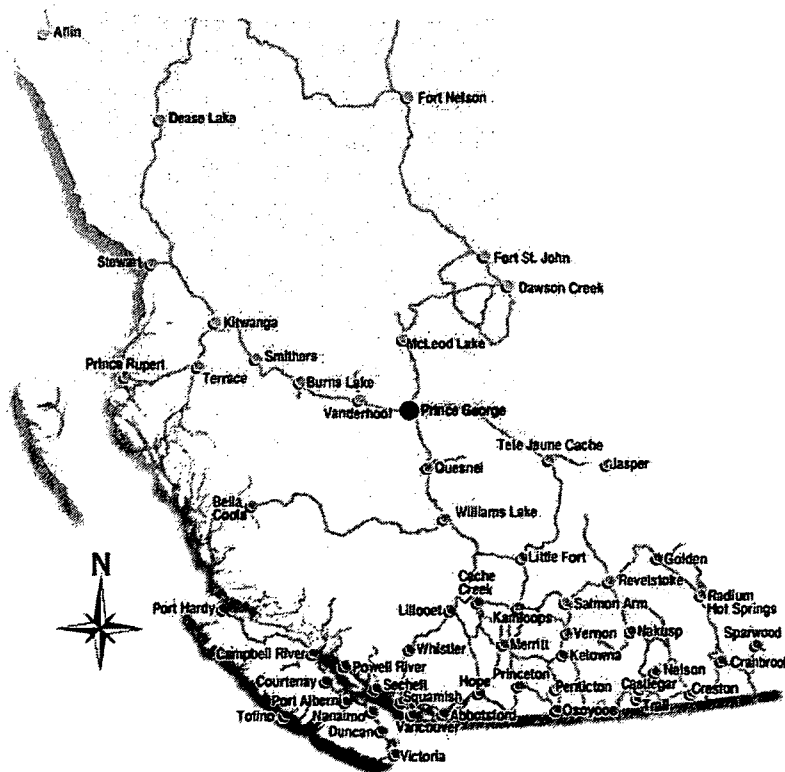
Canada has a large immigrant population. Over the past decades, people from other areas have flooded into the country with the purpose of looking a better life, finding a spouse, gaining an education, finding work, and seeking political refuge.

To pursue a higher education and gain a brighter future, many students from various countries have chosen to relocate to Canada. According to statistics released by Citizenship and Immigration Canada (CIC), the country welcomed over 100,000 international students in 2012, an increase of 60% from 2004 (Pavlich, 2013). Among them, 25,000 came from China, representing a 235% increase since 2004. This significant increase suggests that Canada has become one of the top destinations for Chinese students looking to study abroad (Pavlich, 2013). As the Chinese student population increases rapidly in Canada, I feel it is urgent to conduct more researches to better understand their living and learning experiences in the country.

International students experience a number of adaptation difficulties in their first few years of relocation, which domestic students rarely encounter in Canada. Empirical studies have revealed that international students are likely to experience psychological problems due to exposure to new environments, education systems, languages, and cultural norms (Huntley, 1993; Yeh, 2003; Ying, 1991; Zheng, 1991). I am specifically interested in examining Chinese international students in Canada, instead of the international student population as a whole, because the cultural differences between the two nations are significant. Indeed, research has shown that the adaptation process becomes more difficult as the gap between the international students' native culture and

the host culture widens (Furnham & Bochner, 1982; Furukawa, 1997). Chinese international students may therefore find it somewhat difficult to adapt to Western mainstream culture.

As an international student of health science, I am concerning the overall health status, as well as the cultural adaptation, of Chinese students. Many previous studies have focused on the mental health of international students as they deal with the complex process of adaptation. However, other aspects of their lives have gone largely unstudied. This research will therefore examine the overall quality of life, including the mental, physical health, social connectivity, and living environments of Chinese students living in Northern British Columbia, specifically in the city of Prince George.



Map 1 "Map of British Columbia, Canada". n.d. Government of British Columbia

The interest behind the present study partially developed from my personal experiences and was constructed while reviewing the U-curve of Adjustment Theory (UCT). UCT and its model served as the conceptual framework for this study. It will be discussed further in a later chapter.

There are a few considerations which compose the objectives of the present study. First of all, supporting resources available for Chinese students in Northern B.C. are limited. This research takes place in a middle sized city, Prince George, which is located in North-central British Columbia. Known as B.C.'s northern capital, Prince George is a bustling city of 83,225 people located on the traditional territory of the Lheidli T'enneh Nation (BC stats, 2006). The socio-demographic characteristics of the population in this area are distinct from the rest of B.C. According to the 2006 census, only 9% of Prince George's population were immigrants, compared with 27% province-wide (Statistics Canada, 2006). Furthermore, the distribution of immigrants, when sorted by birthplace, is different from the province as well. Where nearly 30% of B.C. immigrants were from Eastern Asia in 2006, only 8% were in Prince George. The predominant ethnic group of immigrants in this area was from Northern Europe (23%). The 2006 census also revealed that 11% of the immigrant population in Canada did not speak English as their mother tongue. While Chinese languages represent over 80% of the non-English mother tongue population in B.C., it is less than 10% in the Prince George area.

Based on these facts, one may infer that the Chinese are not the predominant ethnic subgroups in Prince George. Due to the limited resources available, Chinese students who come to Prince George to pursue educational opportunities might have greater difficulty adapting to the new environment than those who stay in larger urban

centres such as Vancouver. For example, one can find traditional Chinese food and ingredients much more easily in Vancouver than in Prince George. Various Chinese student and immigrant organizations in the Lower Mainland help students who encounter problems, whereas only a few similar resources exist in Prince George. In this case, as this thesis points out, host schools should take greater responsibility in providing maximum assistance to international students during their acculturation in order to improve their quality of life.

In my own experience, I have found very little services specially designed for Chinese students at UNBC. Possible explanations for this deficiency include a general lack of attention toward Chinese students and a limited budget in the International Student Affairs department. As UNBC expands its partnerships with Chinese educational institutions and absorbs more international students from Mainland China, it has a responsibility to offer a better environment and support services to Chinese students. Such changes will help ensure successful sojourns for prospective students. I therefore hope that my findings will potentially serve as an incentive to raise UNBC's attention towards Chinese students.

Secondly, after reviewing related studies, I noticed that researchers seldom focus on the relationship between acculturation, quality of life, and demographics (Eustace, 2007; Huntley, 1993; Lee, 2000). So far, there is no study that explores the relationship between acculturation and quality of life using Chinese international students as study subjects in Canada. Is students' acculturation related to their quality of life? If so, how do they relate to each other? There are still so many questions that need to be answered. I

expect the present study's findings to answer most of these questions and hope it will act as an inspiration for further research.

This study mainly aims at exploring international students' acculturation and quality of life in northern British Columbia and the relationship between the two. The research focuses on international students who are originally from Mainland China. Five research questions of the present study (objectives), as outlined below, have been examined.

1). Whether the length of stay in Northern B.C. influences Mainland Chinese students' acculturation. According to UCT, students experience different feelings and adjustment levels during their acculturation at different points of time after their arrival. So far, little research has been conducted testing UCT on Mainland Chinese international students. Therefore, the first purpose of the present study is to examine whether UCT applies to this population.

2). To examine possible gender differences related to the acculturation process of Mainland Chinese international students. Traditionally, in Mainland China, the role of a student has been reserved for males, while females were expected to stay at home and take care for their families. Even in the 21st century, the traditional expectation is still likely to affect a certain proportion of females in China. This phenomenon can be commonly found among the population in Northwest China, where society is less open and developed. A study of culture, gender, and connectedness to others revealed that despite the fact that the Chinese were as close to their friends as Canadians, Chinese males were closer to their friends than females (Li, 2002). It suggested that Chinese

females might not be as good as Chinese males when establishing their social networks. As social support is one of the most influential factors in acculturation, therefore, one can assume that traditional views towards gender would likely affect female immigrants' acculturation in a negative way. This conclusion demonstrates how traditional Chinese views of gender and society may still exist among Chinese immigrants and affect students who are studying abroad. Since it has been a decade since the study mentioned above; it is unknown if such ideas still prevail among Chinese immigrants, especially students. Thus, whether there is a gender difference in the acculturation process of Mainland Chinese international students needs to be examined.

3). To investigate whether a student's quality of life increases in proportion to their adaptation to Canadian society. In other words, this question aims to explore the relationship between acculturation and quality of life. Previous researchers have proven that acculturation plays an important role in an international student's psychological adaptation (Eustace, 2007; Huntley, 1993; Lee, Koeske & Sales, 2004; Thomson, Rosenthal, & Russell, 2006). However, no research has presented evidence to demonstrate that acculturation is related to international students' quality of life.

4). To assess whether the length of stay in Canada influences Mainland Chinese students' quality of life. This question is inspired by UCT. Since the model shows acculturation moving in a U-shape with time, will quality of life follow the same pattern as students spend more time in the host country? This study shall examine quality of life among international students to provide an answer.

5). To determine if there are significant differences in quality of life between male and female Mainland Chinese students in Northern B.C. Years of research in women's health have confirmed that stress levels are linked to the length of a woman's menstrual cycle (Ferin, 1999; Harlow & Matanoski, 1991). As this physical problem is only faced by female students, will it bring any differences in quality of life between two genders? In addition, as outlined in question two, Chinese traditional views of gender roles have more or less influenced international students' acculturation (Bang, 2009; Li, 2002). Therefore, will gender roles also affect Chinese Mainland students' quality of life? This study shall examine this connection to gain further insights.

Chapter Two: Literature Review

In this chapter, the literature on which the current study is based is reviewed. There are four sections: a general review of literature and immigrant facts in Canada; an overview of international students in Canada; and the literature review on the acculturation of international students; and literature on the quality of life of immigrants.

Overview of Immigration in Canada

Ever since the mid-20th century, the growth of Canada's population has been very slow, with an overall downward trend. According to statistics, the average annual growth rate from 1950 to 1980 dropped dramatically from 2.8% to 1% (Statistics Canada, 2008, P.12). The low population growth resulted directly from a shortage of human resources, which became an obstacle to Canadian plans for economic development. Immigrants were considered to be the most effective way to increase the Canadian labour force and major contributors to Canadian's economic growth (Bucklaschuk & Wilkinson, 2011; Murray & Sharpe, 2011; Wang & Lo, 2004). The federal government is fully aware of the positive impacts that immigrants have brought to Canada's social and economic development. Hence, in past decades, the federal government introduced new immigration laws to attract more foreigners to settle in Canada.

The Immigration Act in Canada was developed in 1976 and came into effect in 1978. As stated by this act, provinces were authorized to create and amend their own immigration policies based on their situation. British Columbia (B.C.), for example, offers several categories for people who want to immigrate to Canada (Citizenship and Immigration Canada, 2012a). They are a) skilled workers and professionals (this category

is for people who want to settle and work in Canada); b) Canadian experience class (this category is for people who have Canadian work experience or recently graduated and worked in Canada); c) investors, entrepreneurs and self-employed people (this category is for people who want to start a business in Canada); d) B.C. provincial nominees (under this category, the provincial government can nominate people to settle and work in B.C.); e) family class sponsorship (under this category, permanent residents or Canadian citizens can sponsor a family member to join them in Canada); f) live-in caregivers (for those who are qualified to provide care for certain groups of people, such as children, the elderly or the disabled person, they are eligible to apply under this category); and g) refugee (this category is specially developed for those who fear returning to their home country, regardless of their current location).

According to the “Canada Facts and Figures 2010: Immigration Overview”, which was released by Citizenship and Immigration Canada (CIC) (Citizenship and Immigration Canada, 2011a), during the past decades, the number of immigrant residents, both permanent and temporary, is on the rise. Take permanent residents for example; the average number rose from 120,000 during 1970-1989 to 240,000 during 1990-2010 (Citizenship and Immigration Canada, 2011a, P.2-3). The population of immigrants in 2010 reached 280,681, which made it the immigration peak in the past 50 years (Citizenship and Immigration Canada, 2011a, P.3).

Immigrants flooded into Canada for a number of reasons: seeking a better life, getting married or family reunion, pursuing education or working opportunities, starting a business or looking for political refuge. However, from a governmental perspective, only applicants who meet the necessary requirements can be accepted. According to the

“Report on Plans and Priorities 2012-2013”, CIC describes expectations as being that existing immigration programs will strengthen Canada’s economy, reunite families, offer protection to the displaced and persecuted, foster an integrated society, and protect the health, safety, and security of Canadians (Citizenship and Immigration Canada, 2012b). Immigration continues to play a significant role in boosting Canadian society and economic development. By promoting Canada as a destination of choice for investment and opportunity, CIC encourages individuals who have the skills, education, language competencies, and work experience to come to Canada and contribute to the country.

Though CIC deems that family reunion and humanitarian issues are important, some policies were announced recently to reduce, or even halt, the number of applications received under the family sponsorship and refugee categories. Effective November 5, 2011, no new applications to sponsor parents or grandparents will be accepted for processing for up to 24 months; effective October 25, 2012, sponsored spouses or partners must live together in a legitimate relationship with their sponsor for two years from the day they receive permanent resident status in Canada; effective December 15, 2012, refugee claims from certain countries need to be scrutinized more closely, etc. (Citizenship and Immigration Canada, 2012a).

Overview of International Students in Canada

The population of international students is growing rapidly in Canada. For the purposes of this study, international students are defined as those who are in Canada on non-immigrant, student entry documents. They will return to their native country upon the completion of their studies. In general, students require a study permit to legally enter

Canada. As stated in the Immigration Act of 2002, to obtain a study permit, an international student must first, have been accepted by a qualified educational institution in Canada; second, produce documentation which guarantees the payment of tuition and transportation to and from Canada; third, hold no criminal record; fourth be in good health; and fifth, promise to leave Canada at the end of the authorized stay (Department of Justice Canada, 2002). Before 2002, under the Canada Immigration Act of 1976, the only requirement for foreign students to be granted entry was proof of adequate funding for their education. Prior to the implementation of this act, an individual could enter Canada as a visitor, become a student, and then apply for resident status (Mickle, 1985).

As the latest statistics show, in December 2010, the population of international students, coming from more than 100 countries, was over 96,167 and comprised 7% of the immigrant population (Citizenship and Immigration Canada, 2011a, P.86). In the same year, the number of international students who legally stayed in Canada was 218,000, which accounted for 0.6% of the total Canadian population (Citizenship and Immigration Canada, 2011a, p.88).

The population of international students in Canada will keep growing for a few reasons. First of all, it is well accepted that international students bring new ideas and cultures to Canada, which enriches Canada's multi-cultural environment. Furthermore, their contribution to Canada's economy is undeniable. While information released about the federal government's expenditure and revenue from international students is limited, a number of investigations show that the revenue received by the federal and provincial governments, as well as by education institutions, far exceeds their expenditure on international students.

In the 1980s, a few education institutions announced an increase in foreign student fees to approximately twice the amount paid by domestic students (Mickle, 1985). After that, other educational institutions across the country implemented similar policies. Although the tuition for various programs differs across schools, tuition fees for international students remain two to three times greater. For instance, fees for international undergraduate students in B.C. rose by 676% between 1990 and 2006 from \$1,891 (compared to \$1,808 for Canadian students) to \$14,681 (compared to \$4,960 for domestic students) (CBC, n.d.). The national average tuition fees for international undergraduate students rose 5.5% to 18,641 in 2012, on top of a 4.3% increase the previous year (Statistics Canada, 2012a). For example, at the University of Northern British Columbia, for domestic students the approximate cost for the 2010-2011 academic year (two semesters) was 14,764 while it was 26,784 for international students (University of Northern British Columbia, 2012). In general, due to external financial supports, tuition fees for graduate level students are lower than those of undergraduate students; however, again international graduate students pay approximately 8.5% more than domestic students (Statistics Canada, 2005).

Not only have international students contributed to Canada's education industry, but they have impacted the economy in other ways as well, through money spent on accommodation, travel, consumer products, and so forth. A report released by Foreign Affairs and International Trade Canada on October 28, 2012 states that the total expenditures by international students during their period of study in Canada resulted in a \$6.5 billion infusion to the Canadian economy in 2008, surpassing exports of coniferous lumber (\$5.1 billion) and coal (\$6.1 billion). The report also found that international

students produced about \$291 million in government revenue in 2008, and created economic activity that sustained employment for 83,000 Canadians (Foreign Affairs and International Trade Canada, 2009)

With the benefits mentioned above, CIC will surely continue delivering initiatives to help Canada maintain its competitive edge in attracting and retaining international students. To accomplish it, CIC improved and modernized their client service by developing a new client feedback mechanism, expanding electronic services to allow online client self-serve, and replacing existing visa application centres (VAC) with a new global VAC network (Citizenship and Immigration Canada, 2012b). The changes made will decrease processing times for the permits required by international students. Consequently, more international students will be able to study in Canada, while those who are already in Canada can continue their studies without worrying about immigration documentations.

The number of international students in Canada will also increase due to a shift in immigration policies. According to the 2012 Annual Report to Parliament on Immigration, the federal government intends to admit between 240,000 to 265,000 permanent residents in 2013 (Citizenship and Immigration, 2012c, P.8). Of this number, 62.3% will be distributed to the economic class, while the rest will be shared by the family class and humanitarian classes (Citizenship and Immigration Canada, 2012d). The economic class includes federal skilled workers (federal-selected and Quebec-selected), federal business immigrants (federal-selected and Quebec-selected), Canadian experience class, live-in caregivers, and the provincial nominee program.

The Federal Skilled Worker (FSW) Program is the Government of Canada's program for selecting foreign skilled workers. The selection is based on the applicant's education, age, work experience, official language proficiency, pre-arranged employment in Canada, and adaptability. The program has played a leading role in receiving skilled foreign workers for Canada's future labour force. However, due to the inability to process all of the applications that have been sent in, the federal government decided no new applications will be accepted until 2013 (Panusa, 2012). According to the Annual Report 2012, the planned admission of FSW in 2013 will be reduced to 53,500-55,300, which is nearly 5,000 less than the average number admitted in previous years (Citizenship and Immigration, 2012c, P.10).

As the second largest economic immigration program after FSW Program, the Provincial Nominee Program (PNP) provides provinces with a mechanism to respond to their particular economic needs by allowing them to nominate individuals who they consider critical to local labour market demands. The number of PNP nominees continues to increase. In 2011, a record 38,420 immigrants were admitted under Citizenship and Immigration (Citizen and Immigration Canada, 2012c). In 2013, it is expected that between 42,000 to 45,000 applicants will be admitted to Canada under the PNP (Citizenship and Immigration Canada, 2012d).

While fewer immigrants will be admitted through the FSW program, and other categories remain at the same level, there is one category that needs to be paid attention to. The Canadian Experience Class (CEC) is the only category which has been given more planned admissions in 2013 than in previous years. The CEC was developed and came into effect in 2008 as a program specially designed for temporary foreign workers

or foreign students who graduated in Canada and possess knowledge of English or French and have qualifying work experience. The admission range of CEC rose from 2,500 in 2009 to 6,000 in 2011. In the upcoming year, it will rise to as high as 10,000 (Citizenship and Immigration Canada, 2012).

The government's intentions towards future immigrant structure can be seen through these policy shifts. Despite being the most effective way to recruit human resources for Canada's labour market needs, the FSW program has its disadvantages. Unlike PNP and CEC, FSW is open to applicants outside of Canada, many of whom have no experience living in Canada. Even though, on average, immigrants who enter Canada under FSW are usually better educated than native-born Canadians, several indicators show their employment and unemployment rates as well as earnings are substantially different from those of native-born Canadians (Statistic Canada, 2010). For example, the latest report on immigrant income found that the average annual income for FSW immigrants dropped from \$44,912 in 2006 to \$21,562 in 2010 (Statistics Canada, 2012b). Immigrants reflect that the country is not fully utilizing their talents. This phenomenon can be partially attributed to cultural difference as well as difficulties in communication. The government focused on these immigrants' skills and education level but failed to take into account problems arising from adapting culturally to Canada.

For the past decade, the high unemployment rate common amongst these skilled workers did not boost Canada's economy, but instead added more burdens to Canada's health care and welfare system. As the Canadian government became aware of this situation, they took steps to prioritize immigrants from within rather without. Even though international students are only temporary residents, over the course of their study

they have adapted to Canadian culture and gained experience living and working in Canada, making them the obvious choice for the immigrant labour needed for Canada's economy.

The third reason for the increase of international students is that the applicants themselves are experiencing a change in mindset. As a result of aforementioned government policy shifts, some applicants who might have applied for the FSW program will now switch to applying for a student permit instead. This phenomenon might not be too obvious right now. Nevertheless, it will likely become evident as long as the Canadian government continues decreasing admissions for the FSW program.

In conclusion, the federal government will continue to accept more overseas students. These students will likely then settle in Canada due to their fit with Canadian economic growth and labour force demand. However, with the increasing number of international students, more attention should be paid to common issues faced by most international students, such as the cultural adaptation process and quality of life.

Acculturation of International Students

Although Canada is well-known as a multicultural country with diverse cultures, cultural differences still greatly affect the adaptation process of international students. This process and its associated outcomes are called "acculturation" (Redfield, 1936). Redfield, Linton and Herskovits (1936) gave a classic definition of acculturation: "Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups." (see Appendix A). In

short, acculturation refers to the process of cultural and psychological changes that result following the meeting of different cultures. The effects of acculturation can be seen at a group level and at an individual level in either or both interacting cultures. At the group level, acculturation often results in changes to culture, customs, and social institutions. Noticeable group level effects often include changes in food, clothing, and language. At the individual level, acculturation is associated not only with changes in their daily behaviour, but also with numerous measures of psychological and physical well-being.

Transit from one education system to another is also cultural transition to some extent. It has been well documented that international students encounter a lot of difficulties when they pursue further study overseas. Various studies revealed that acculturation has an influence on international students' life, including daily activities, academic performance, mental health, general health, friendship or interpersonal relationship establishment, and so on (Berry, 1997; Lee, Sobal & Frongillo Jr, 2000; Long, Yan, Yang & Oudenhoven, 2009; Selby & Wood, 1996; Yeh, 2003). Studies concerning the factors that influence the acculturation process have been carried out in past decades. The following variables have been identified as affecting the duration and the quality of acculturation process. These include: a) language fluency (interaction with local friends); b) cultural factors (cultural distance, food habits); c) personality factors (extrovert, introvert); social support (social network); and d) demographic factors (gender, age, socioeconomic status) (Bang, 2009; Furnham & Alibhai, 1985; McCrae et al, 1998; Nicholson, 2001; Satia et al., 2000; Yue & Le, 2009; Zhu, 2007).

Language Barriers. One common issue faced by most international students is communication challenges that arise from a language barrier. It is generally agreed that

language ability affects the acculturation process the most over all the other factors on a wide range (Butcher & McGrath, 2004; Long et al, 2009; Sun & Chen, 1997; Zhu, 2007). For example, language ability affects an international student's academic performance. In mainland China, English language education emphasizes reading and writing rather than speaking. In addition, two of the most popular English language tests all over the world, test of English as a Foreign Language (TOEFL) and Graduate Record Examinations (GRE), are especially designed for foreign students who want to study in North America. Both of them emphasize students' ability to read and write English. Sun and Chen (1997) mention that most Chinese students come to the United States with high scores on the English language test. However, having such high score does not imply the student's English ability is sufficient for living and studying in North America. Due to lack of oral communication practice, Chinese international students indicate that they cannot communicate appropriately in class with professors and classmates. In Yue and Le's (2009) interview, one Chinese student said she felt incredibly isolated in the tutorial because she could not fully understand what the tutor and other students were saying. When she was ready to express herself, the topic had already changed. Oftentimes, graduate students cannot fully participate in class discussions despite their high education level because of poor command of terminology specific to their disciplines.

For international students, insufficient language ability also inhibits their interaction with domestic (local) people and thus impedes them from integrating into the main stream culture. This is the reason why students with better language competence encounter fewer cultural adjustment problems than students who have a tenuous grasp of the language (Church, 1982). Previous study has also pointed out that, as time progresses,

foreign students gain a better grasp of the English language, and through the process of acculturation, they become more familiarized to the host culture (Espinosa & Massey, 1997).

The language barrier is the major concern as well in international students' daily lives. For example, because buses in B.C. do not stop at a bus stop unless requested by the passengers, students might miss their stop because their English abilities are not good enough to allow them to ask for help even though the transit company provides bus schedules and routes for students' reference. Language also becomes an obstacle when it comes to health care. It impedes international students from accessing health care service. A study about the psychological adaptation of Chinese students in Canada points out that international students tend to underutilize regular and mental health services due to their limited English proficiency (Zheng & Berry, 1991). In addition, although in large urban/suburban cities many health agencies such as hospitals, clinics, and mental health services provide translation services for foreigners, such services are lacking in many areas of Canada particularly northern regions such as Northern B.C. This is a disadvantage for international students living in those areas.

Cultural norms. International students may encounter considerable problems during acculturation due to different cultural norms and values between the native country and the host country. These may include cultural distance, dietary patterns, and values and beliefs in the education system.

As Furnham and Bochner (1982) pointed out, the greater the differences in religion, language, and climate between the host country and the student's native country,

the more difficulties the overseas student is likely to experience (referred to cultural distance theory). For instance, American students studying in Canada encounter fewer difficulties than Asian students, as American culture is much more similar to the Canadian than are Asian cultures (Nicholson, 2001). In some cases, there can be a vast cultural distance, even between students from similar areas. For example, compared to the students from Mainland China, Chinese students from Hong Kong might find it easier to study in Canada because of Hong Kong's colonial history and its different education system (Mickle, 1985). Another example of cultural distance is seen by the fact that cultural distance influences the sojourner's adjustment in terms of psychological adaptation. By using the Cultural Distance Questionnaire (CDQ) which was developed by Babiker (1980), Asian students were found to be in greater psychological distress when the cultural distance between their native country and host country was greater (Furukawa, 1997).

Another vital factor in cultural norms which causes difficulties in adaptation is food habits. Dietary habits form a key component of any culture and sometimes can be used to determine which culture someone is from since some cultures have certain dietary restrictions (Ward, Bochner, & Furnham, 2001). So changes in dietary patterns are considered to be one of the most important changes during the acculturation process. According to research, most less-acculturated Chinese-American women tend to westernize their breakfast shortly after their arrival, as they consider the Western style breakfast convenient to make. However, the acculturation of their other dietary patterns seems to be proceeding slowly (Satia, Patterson, Taylor, et al, 2000). Another study, which focuses on the dietary acculturation of Chinese students in the United States,

reveals that the changing of eating habits/food preferences and acculturation are two inter-related processes for two reasons (Peng, 2005). First, because the dietary guidelines, food labels, and other sources of dietary information are different from the students' native country; it takes time to become familiar with it. Second, due to their limited language capabilities, the sources of getting dietary information are limited to students, who most likely can only depend on their co-national fellows for this information.

The conflict and misunderstanding between different cultural backgrounds also exists in an academic setting. This is especially evident among Chinese international students. In Chinese culture, the academic environment puts emphasis on the Confucian values of humbleness, harmony, compliance, and self-effacement (Kim, Atkinson & Umemoto, 2001). Confucianism is the foundation of the Chinese education model. It emphasizes that harmonious relationships between people are important; that elders should be esteemed; and that knowledge should be respected (Alon & McIntyre, 2005). Students in China are taught to comply with their teachers and to not question the textbooks. They are not allowed to express their thoughts or ask questions until given permission by their teachers. In contrast, a more western style of education (used in places such as Canada and United States) places emphasis on developing each student's individuality and does so by encouraging students to speak up and express their opinions. So when Chinese students study overseas, they may find the different education styles and teacher expectations quite challenging. They are not aware that they are expected to act like their domestic counterparts (Yue & Le, 2009). They are expected to take an active role in class discussion by expressing their thoughts and asking questions of their

professors and classmates, but the reality is (in my personal experience) that Chinese students tend to remain silent in class for the most part.

Generally speaking, the western academic environment encourages individual characteristics such as direct communication and independence, while the Chinese environment focuses on building Confucian values that lead to collectivism. In order to adapt to western academic norms, it may be necessary for Chinese international students to abandon their established learning style and this may prove challenging.

Personality. With respect to personality and acculturation, despite all the research that has been done on whether personality predicts and influences acculturation, researchers still cannot come to an agreement. Early investigations of sojourner adjustment assumed that attitudes and ethnocentric tendencies would impede the sojourner in coping effectively with the new culture, values, social norms, and language (Church, 1982). Regarding international students, in the same study, Church (1982) presented the idea that more positive sojourner adjustment or favourability of attitudes has been related to less authoritarianism. Later on, scholars shifted the focus to whether collectivistic and individualistic characteristics produced different patterns in the acculturation process. When comparing the data collected from students of collectivist and individualist background, researchers found that for individualist-bound students, personality plays an important role in their acculturation, while adherence to cultural norms and values is a vital factor for collectivist-bound students (Jang & Kim, 2010; McCrae et al., 1998).

The debate over whether extraverted versus introverted personalities affect sojourners' acculturation, and how it affects students, has lasted for a long time. Some studies suggest that having an extraverted personality does not help international students cope with cultural adjustment. For example, a study of native English-speaking sojourners in Singapore suggested that extraversion was associated with increased feelings of boredom, frustration, and depression (Armes & Ward, 1989). However, other researchers hold that the opposite is true. Searle and Ward (1990) studied the psychological well-being and sociocultural competence forms of adjustment of international students during cross-cultural transitions in New Zealand. Their findings indicated that extraversion was predictive of enhanced psychological well-being. Another research project supports their results. This project aimed at exploring the relationship between the Big Five personality dimensions and cross-cultural adjustment among international students in Australia (Ward, Leong, & Low 2004). The Big Five personality dimensions refer to *neuroticism*, *extraversion*, *openness*, *conscientiousness*, and *agreeableness*. Findings demonstrated extraversion was positively related to psychological and sociocultural adaptation in both groups.

Attempting to reconcile these conflicting findings, Ward and Chang (1997) proposed a hypothesis called "cultural fit", which brings up the importance of interaction between the acculturating person and their situation. In many cases, it is the discrepancies between the acculturating person's personality profile and the host culture's norms that have impact on cross-cultural adjustment, rather than personality per se. Nevertheless, more studies should be conducted to test this hypothesis.

Social support. Cobb (1976) presented the concept of social support in his study and defined it as information leading the subject to believe that he/she is cared for and loved, appreciated and valued; simultaneously, he/she is also a member of a network of communication and mutual obligations. In other words, social support combines the function of social relationships with the assistance received from others, thereby helping individuals exchange resources and resolve their own problems.

According to research done on the importance of relationship in helping international students adjust, there is a positive correlation between having a strong and supportive social network and an easier adjustment to the new country (Bang, 2009; Bochner, Mcleod, & Lin, 1977; Hung, 2010; Hwang, Wang, & Sodanine, 2011; Li, 2002). The social network of international students can be categorized into three types: *co-national network*, which consists solely of close friendships with other students from the same country, or linguistic area, or religion; *host-nationals network*, which is composed of friendships with students from the host country; and *multi-nationals network*, which is made up of friendships with students from both the original and the host country (Furnham and Alibhai, 1985). As Furnham (1985) points out, international students have a strong preference for co-national friends for their friendship network and preferred companions. In the 1980s-1990s, the question was raised about whether the preference of co-national, host-national, and multi-national friends influences international students' acculturation process and how does it exert influence. Findings from recent research lend support to the idea that the preference for co-national friends is related to a higher amount of experienced difficulties and a lower level of success (Iverson, 2009; Myers & Helena, 2008; Wang, et al, 2012).

In addition to overall general physical health and wellness, the most common problem facing international students is mental and psychosocial health. Studies have indicated that international students experience more mental health problems than their domestic counterparts (Eustace, 2007; Huntley, 1993; Lee, Koeske, & Sales, 2004; Thomson, Rosenthal, & Russell, 2006). The process of adaptation to the host culture is usually difficult and produces a type of stress which is called acculturative stress (Berry, 2006; Finch, Frank, & Vega, 2004). International students need to adapt to a new culture and a new educational and social system, so acculturative stress is commonly experienced by international students (Yeh, 2003). As an important source of support and assistance for international students, social networks play a vital role in promoting their mental, psychosocial, and physical health.

Here is an example. As cultural distance exists, the great cultural gap between the Asian and the Western culture leads to a difficult acculturation process for Asian students. Symptoms of mental illness have been reported to be strongly correlated to Asian students' acculturative stress level. However, social support has been shown to alleviate the effect of stress on symptoms. Students with high levels of social support are less likely to report mental illness symptoms even under increasing levels of acculturative stress (Lee, Koeske, & Sales, 2004). In order to promote the mental health of international students, an internet-based intervention was tested to enhance the social support, hardiness, and acculturation among Asian students (Kanekar, Sharma, & Atri, 2009). Test results indicated that after two months of intervention, students in the experimental group showed significant improvements in mental health indicators.

In discussing social networks and social support nowadays, in addition to traditional social support, online social support cannot be over-emphasized. Internet social networks have rapidly developed in recent years. In a wide range, there are networks such as Facebook, Twitter, Weibo, and other similar websites which connect users all over the world. In a narrow range, there are school forums, discussion groups, and blackboard systems which connect students locally. Such online resources not only provide unprecedented cyberspace for students to communicate and exchange ideas, but also bring international students chances to build up their social network in real life. International students who actively engage in online group activities tend to have fewer social difficulties (Ye, 2006a). Furthermore, acculturative stresses are buffered for those international students who have a high usage of online social networks (Ye, 2006b). The underlying reason for this phenomenon is that getting in touch with families and friends back home is becoming easier and more convenient via internet for students. Most international students, especially those with an introverted personality, rarely take the initiative to seek help or counselling. Through online means, however, they can seek advice and counsel from loved ones instead of wallowing in depression or stress on their own. For students who lack social support in their new environment, the internet presents a way for them to cope and eventually overcome the problems they will likely encounter in acculturation.

Quality of Life of International Students

Quality of Life (QOL) is a measure used to examine the general well-being of individuals or societies. It has been used in a wide range of contexts, including human development, healthcare, politics, etc. (World Health Organization, 1997). Quality of life

differs from standard of living as it not only focuses on individual's financial status but also on the quality of living environment, physical and mental health, education, social belonging, and other aspects. Overall, a better quality of life is critical for normal and productive individual performance (Bhandari, 2012).

As interdisciplinary study evolves, many sub-disciplines are brought together into one activity to solve problems in a new way that transcends traditional boundaries. Two famous examples are using physical anthropology in researching health behaviour and risk of chronic diseases and using psychology in the promotion and maintenance of health, the prevention and treatment of illness, and the improvement of the health care system and health policy formation (B.Chakraborty & R.Chakraborty, 2010; Taylor, 1990). In recent decades, anthropology has played an increasingly important role in health-related research. Apart from the study of genetic variation and disease prevalence in different racial and ethnic groups, researchers have now shifted their focus on how cultural anthropological concepts determine health behaviours and disease prevention (B.Chakraborty & R.Chakraborty, 2010).

In the 21st century, development in technology and the globalization of the world economy have taken population mobility to an unprecedented peak. It is increasingly uncommon to find a country composed of a single race or ethnic group. Therefore, cultural tradition, language, and beliefs/religion, which affect an individual's health behaviours, should be taken in consideration and be incorporated when implementing a population-based intervention strategy (Arcia, Skinner, Bailey, & Correa, 2001). Though the concept of acculturation has a long history which can be dated back to 1936 (Redfield, 1936), its use in health related and disease risk research has a comparatively short history.

It is believed that by studying the process of acculturation, the potential risk factors that cause the increased prevalence of certain chronic diseases can be identified, particularly in immigrant and ethnic minority populations. A proper understanding of this viewpoint could be beneficial to plan intervention programs, which aim to maintain the health status and improve the quality of life in such populations (Lackey, 2006).

As acculturative stress is most commonly seen during the acculturation process, until now most research around cultural viewpoint and quality of life has involved immigration groups or mentally ill patients (Fan & Chen, 2011; Lackey, 2006; Yang & Wang, 2011). According to Berry (1997), the outcomes of acculturation can be categorized into four types: integration (individuals have interest in both mainstream and original cultures); assimilation (individuals only show interest in mainstream culture); separation (individuals are interested only in their ethnic culture); and marginalization (individuals isolate themselves from both cultures). Low acculturation types in immigrant groups, including separation and marginalization types, have been identified as predictors of high psychological distress and poor quality of life. In contrast, individuals with high acculturation levels tend to have a good quality of life and perform well in physical functioning (Thoman & Suris, 2004). Such study results revealed two things: a) the importance of taking acculturation levels into account when planning intervention programs or constructing assessments for immigrants with mental illnesses; b) in order to promote quality of life for immigrants, more actions should be taken to encourage the immigrants to integrate, assimilate, or adapt to the mainstream society.

When searching for studies on acculturation and quality of life for international students, the results are disappointing. A number of educators have devoted themselves to

understanding the effect of cross-cultural adjustment on international students' mental health and how students react to it. Previous studies showed that coping strategies play an important role in adaptation to stressful life (Somerfield & McCrae, 2000). Coping strategies are the effort, including behavioural and psychological, that an individual employs to deal with, tolerate, and reduce stress. They can be classified into two types - active and avoidant coping strategies (Coyne & Racioppo, 2000). By adopting active coping strategies, one response either behavioural or psychological intends to change the nature of the stressor or thoughts about the stress while avoidant coping strategies lead people into activities or thinking that keep them away from dealing with stressful events (Coyne & Racioppo, 2000). Previous studies reported that sports, music, hanging out with friends, going into isolation, entertainment, and use of alcohol/tobacco are several common coping strategies adopted by university and college students (Ashton & Kamali, 1995; Al-Dubai, Al-Naggar, Alshagga, & Rampal, 2011).

Despite of many effort have been putting in understand international students mental health and their coping methods, only a few attention has been focusing on international students' quality of life. Some scholars in Australia have tested the hypothesis of "whether religion/spirituality is/are beneficial to quality of life" can be observed among international students and whether religion/spirituality can act as a coping mechanism during the students' acculturation period (Hsu, Krageloh, Shepherd, & Billington, 2009). Their results indicate religion/spirituality is significantly correlated with both socio-psychological and quality of life in international students. This study also suggests that religion/spirituality might function as a coping mechanism during acculturation of international students. A further similar study extends the hypothesis to

test the reactions of international students from different areas (Chai, Krageloh, Shepherd, & Billington, 2012). Its results suggested Asian students are more likely to use religious coping strategies than those from Europe. Furthermore, Asian students' use of religious coping is effective in improving social and psychological quality of life.

Summary

According to the literature and research, language barriers, culture norms, personality characteristics, and social supports are the main factors that influence the acculturation process for international students. Although these aspects are discussed individually, they all interact with one another. For instance, language proficiency and social support are interrelated. Being unable to speak English fluently affects a student's communication with helpers from either school or domestic public service agencies. People from the host country tend to lose sight of most problems that exist in international students' cultural adaptation process because students seldom seek help. Hence, the social supports available for international students are often limited.

Regarding the topic on quality of life of international students, a great number of studies are focused on the relationship between international students' acculturation and psychological health (Bradley, 2000; Detommaso, Brannen, & Burgess, 2005; Zheng, 1991), while only a few are interested in how the role of religion affects international students' quality of life (Chai, Krageloh, Shepherd, & Billington, 2012; Hsu, Krageloh, Shepherd, & Billington, 2009). Nevertheless, these studies only involve parts of quality of life of international students. There remains a lack of research that takes into account

all the aspects in quality of life, including physical health, psychological health, social connection, and the living environment.

Chapter Three: Conceptual Framework

This research project adopts U-curve of adjustment theory to investigate Chinese Mainland students' acculturation and their quality of life in northern B.C., particularly in Prince George. This section discusses the methodology of the research.

Conceptual Definition of U-curve of Adjustment Theory

It is believed that the U-curve of adjustment theory (UCT) has been the most consistently used theoretical framework on cross-cultural research in recent decades (Black & Mendenhall, 1991). The UCT describes the phases of sojourner adjustment over time. It emphasizes the stages of sojourners' adaptation while living in a host country. Most descriptions of UCT include four stages: the honeymoon stage, the culture shock stage, the adjustment stage, and the mastery stage (Figure 1). The existence of different stages during cultural adaptation suggests that there is a transition in understanding and acclimatization when individuals are shifting from a home country to a host country. In the case of this study, I will localize the UCT to Chinese students, specifically those at the University of Northern British Columbia and the College of New Caledonia in Prince George.

During the honeymoon stage, everything is new, nice, and exciting for the foreign student. This may be due to previously unknown amounts of freedom from cultural and parental expectations, allowing for increased exploration and independence. In this stage, which can last from a few days to a couple of months, the individual often feels happy and in a good mood. These pleasant feelings last until the second stage (culture shock) begins.

In the culture shock stage, foreign students start to feel uneasy or uncomfortable with daily life in the host country. The surroundings, which used to fascinate them, may no longer interest or impress them. This phase requires coping strategies to overcome the socio-psychological changes and daily challenges. The length of this phase can vary from a couple of months to one year, depending on the student's level of adaptation. The culture shock stage may be very difficult for some; however, relief is often found in the adjustment of the third stage.

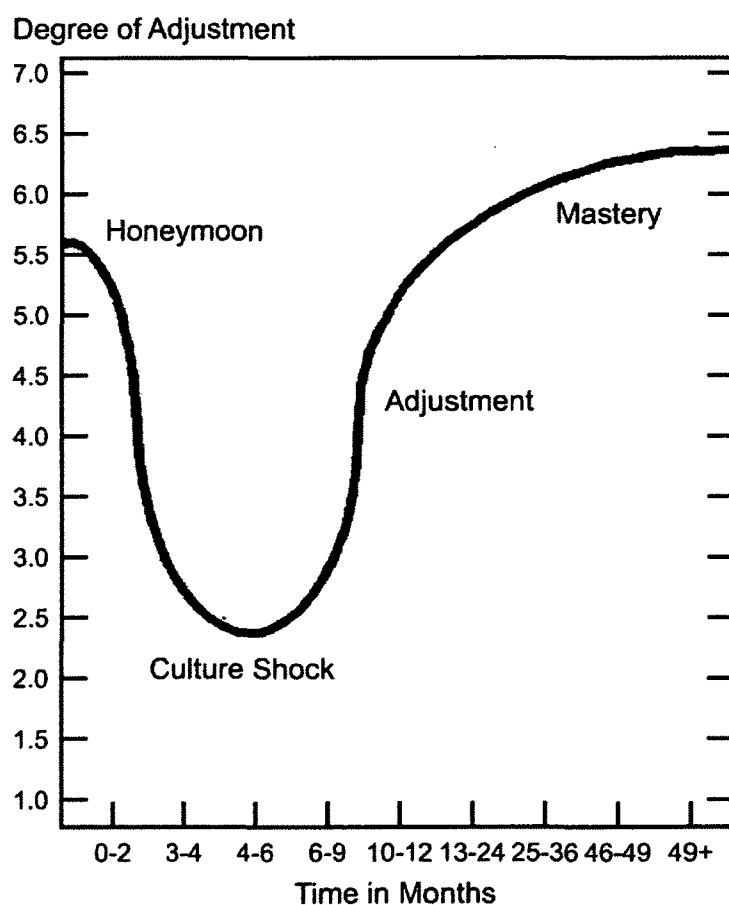


Figure 1. *U-curve of adjustment theory*. From U-curve adjustment hypothesis revisited:

A review and theoretical framework, 1991, Retrieved September 23rd, 2011, from

<http://www.jstor.org/stable/155208>

The adjustment stage occurs as individuals gradually adapt to the new environment and learn how to behave appropriately according to the cultural norms of the host country. This stage may take a couple of months to several years, and varies depending on the individual.

The final stage is known as mastery stage and is generally seen around two to three years after the sojourner's arrival. This stage indicates that a high level of adjustment has been achieved. Students in this level of adjustment could function effectively in the new cultural environment without any problems.

Brief Literature Review of the UCT

Computer searches using online databases were employed to review the literature on the UCT. Among the topical databases consulted were social science, psychology, behavioural science, and health care sciences. This ensured exploring the specialties of multiple disciplines.

The UCT was first proposed by Lysgarrd in 1955 based on a retrospective study of 200 Norwegians (1955). All of the study subjects had studied as exchange students in the United States. He divided the students into three groups based on the length of their stay in the U.S. (six months, 6-18 months, or 18 months and over). Two indicators, professional-educational and personal-social adjustment, were examined. When comparing these three groups, Lysgarrd found that the students who had stayed in the U.S. for six to 18 months reported feeling "less well" adjusted than the other two groups, indicating that the process of adjustment brings a series of ups and downs as students adapt to the U.S. culture.

Even though Lysgarrd did not offer any theoretical or statistical explanation of the differences between the study groups, the UCT has been placed at the central position of cross-cultural study for nearly two decades after the discovery was made. Scholars who agreed with the UCT carried out a great number of studies, mainly in the 1960s and 1970s, in an attempt to provide statistical evidence to support the existence of UCT (Black & Mendenhall, 1991). Meanwhile, the concept had been extended to cover the attitude and social interaction-change patterns of sojourners (Church, 1982; Black & Mendenhall, 1991). Due to the out-dated information found in many of these experiments, the present study will elaborate primarily on those with similarities useful for comparison.

Chang's study investigated the same population as this research study to examine the adjustment of 209 Chinese students who had been in the U.S. for a certain period of time (1973). She divided them into three groups based on the length of residence in the U.S. (under three months, seven to 18 months, more than 18 months). The U-curve hypothesis was assessed by using the chi-square test. The attitudes of Chinese students toward the U.S. among the three stages of residence were compared. In general, the results showed a pattern of adjustment supporting the hypothesis about attitude change among sojourners. However, the marked differences in attitude were only shown between the first and second stage students, and not between the second and third stage students as was expected.

Another study conducted in the early 80s by Surdam and Collins (1984) provided comprehensive statistical evidence to support the UCT. They randomly sampled and interviewed 306 international students from a university in the U.S. The results indicated a significant relationship between student adaptation and a number of variables, such as

the international student's social interaction, English language ability, parental education, and perceived student discrimination. Furthermore, the results support the UCT by revealing that the international students who had been in the U.S. from two to four years scored significantly lower, which refers to low acculturation level, than those who had arrived more recently or had been in the U.S. for more than four years.

As aforementioned, the UCT has been the most popular model in cross-culture studies for decades. However, with the increasing number of studies testing the model, many have come to challenge the UCT by pointing out that the cross-culture adjustments do not follow a U-curve pattern but rather a J-curve pattern (Klineberg & Hull, 1979; Ponizovsky, Ritsner, & Modai, 2000; Wong-Rieger & Quintana, 1987). Scholars who support the UCT give possible explanations for it. They argue that the study results did not support the UCT because the declined stage is generally very short while the examiners began the measurements too late. Most of the studies rejecting the UCT started their investigation three months after the sojourner's arrival. Thus, these studies might miss the decline from the honey moon stage to the culture shock stage. Markovizky's study supports this point of view. Markovizky and Samid (2008) examine how the role of length of residence determines the psychological adjustment of new immigrants. Cross-sectional and longitudinal methods were both used in this study. The result of the cross-sectional study completely confirms the U-curve hypothesis and the result of longitudinal study partially confirms the concept. It is important to note that both the cross-sectional and longitudinal studies indicate the existence of the first stage of UCT as predicted. It concludes approximately at the end of the immigrant's third month in the new country.

This analysis precisely explains why the J-curve emerges in some previous cross-culture studies.

Rationale for Choosing the UCT as Conceptual Framework

There are a few reasons for choosing the UCT as the conceptual framework for this present study, including my personal experiences, theoretical rationale, and practical rationale.

Personal experiences. Based on the personal recollection about my adjustment to Canadian culture, I believe my personal experiences were in a concordance with the U-curve pattern. Upon arriving in Canada, my life was fulfilling and occupied by assorted activities, such as student orientations and campus tours, student society events, and international student gatherings, and so on. I frequently phoned my family and friends in China to share new and exciting experiences, and kept a blog with pictures and videos to record my lovely sojourn life.

Time flies and winter came before I even noticed it. The winter in Prince George is a difficult challenge for someone who is from a tropical area like me. I needed to learn basic skills in order to survive through the winter. For example, I had to learn how to walk safely on a slippery road, stay warm in -20 degrees (or colder) weather, and shovel a driveway. Gradually, I tended to hide in my basement for the most of time and only went outside if I ran out of food. Coupled with the stress from schoolwork, the situation worsened and I developed depression. During this time, I repeatedly called my family in China to tell them that I wanted to go home. Meanwhile, I stopped updating my blog as there was no more excitement event happened in my life and I did not have any

motivation to maintain it. This was the most difficult experience I have ever had in my life.

The depression lasted for several months until I found my first part-time job in Canada the following year. The fast working environment brought me lots of challenges, but also gave me an opportunity to learn more of the western culture and the place I was living in. As time passed, I felt myself gradually adapting to life in Canada. In a word, my personal sojourn experiences fit the UCT pattern, making it a meaningful and impactful choice for the conceptual framework of the present research.

Theoretical rationale. There is more theoretical reason for using the UCT in this research. In Black and Mendenhall's review of UCT (1991), Bandura's Social Learning Theory (SLT) was used to explain why the UCT stages appear and how individuals move from one stage to the next. Bandura (1977) defined SLT as an individual's learning based on the consequences of their actions; individuals can also learn to behave by observing other people's behaviour, associated consequences, and by imitating the modelled behaviour.

By demonstrating how an individual adjusts to new cultures through the process of learning, SLT provides a theoretical context within which UCT can be explained. The honeymoon stage of UCT appears because new arrivals fail to recognize the cultural differences of their new environment and the negative outcomes of their inappropriate behaviour. Therefore, the newcomers are most likely to have care-free lives at the initial stage. During the culture shock stage, immigrants begin to receive negative feedback from their surroundings. As the length of residence increases, they gradually realize the

behavioural differences between their home country and host country. They sense they are exhibiting inappropriate behaviours, but do not know how to act correctly. Thus, the newcomers are prone to developing culture shock. The adjustment and mastery stages occur due to the individual's constant exposure to new social situations and modelled behaviours in the host country. The increasing availability and understanding of modelled behaviours enable them to observe, imitate, and finally reproduce the appropriate behaviours.

While some scholars (Church, 1982; Ward et al, 1998; Ward et al, 2004) question whether UCT is appropriate to use in cross-cultural research due to potential shortcomings in its accuracy and reliability, I consider it is a strong and persuasive model to be used in such a study because it has both statistical and theoretical support. In this case, SLT seems also a suitable conceptual framework for the present study; however, I decided to hold on to the current theory on account of its practical application.

Practical rationale. Apart from being a popular theory in cross-cultural study, UCT has been widely used in educational settings and international industries as well.

Student counsellors who work in university or college's student well-being centre or staffs who work closely with international students could work out plans to support international students who are going through the cultural transition based on the UCT. One of the most effective ways is to hold an orientation for new international students. In Prince George, the university, college, and municipal government all organize welcome orientations for arriving students every year. I consider this an excellent beginning for the international student's sojourn life. By understanding the UCT model and its outcomes,

student consultants can give suggestions to students based on the stage they are in and explain that what they are experiencing is very common and natural.

Since the 1990s, the globalization of the economy has increased (Littrell, et al., 2006). For many international organizations, sending employees abroad to develop global business is an important strategy. These people are called expatriates. In the past decade, efforts have been invested in examining the effectiveness and affecting factors of cross-cultural training (CCT) for expatriate preparation (Lee, 2006; Littrell, et al., 2006; Pires & Stanton, 1999). CCT is the educative processes used to improve intercultural learning through the development of the cognitive, affective, and behavioural competencies needed for successful interactions in diverse cultures (Morris & Robie, 2001). Together with SLT, UCT serves as the theoretical framework that has been used in the development of many CCT programs. UCT is important to CCT development because it demonstrates that expatriates have very different experiences at different periods of their assignment. As a consequence, CCT may need to be designed to meet the needs arising from the different stages of adjustment.

Other than the two above-mentioned cases, UCT also has other practical functions. For instance, for the people who are interested in immigrating or sojourning to other countries, UCT could work as a useful tool to increase their perceived knowledge towards moving into a new environment. UCT not only guides the research, it may be used as a tool to construct useful plans or programs.

Chapter Four: Research Methods

This research employs quantitative research methods and statistical analysis to explore the acculturation and quality of life (QOL) of Mainland Chinese students in a middle size city in Northern B.C. This chapter outlines and discusses recruitment of participants, development of instruments, procedures of data collection, and data analysis.

Recruitment of Participants

Subjects in this present study are Chinese Mainland international students who are currently studying in Prince George. In order to participate in the research, all subjects must: a) be citizens of the People's Republic of China; b) be from Mainland China, excluding Hong Kong, Macau, and Taiwan; c) come to Canada with a non-immigrant student entry document (e.g. study permit); d) currently study at the University of Northern British Columbia (UNBC) or College of New Caledonia (CNC);

Recruitment began at UNBC using random sampling. This method ensures that the sample best reflects the characteristics of the parent population (Hurlburt, 2005). Conducting a random sample meant that I needed to put aside my personal preferences and desire for convenience, and use chance to select the sample. So at the initial stage, Chinese students were randomly selected at the UNBC food court or the adjacent hallway. After one week of simple random sampling, I realized that there were many students who could not be accessed using this method. Some might have been in class or out of school when I was recruiting participants. Therefore I put more effort into advertising. A call for participants was posted on an advertisement board at UNBC and announced through the *Fellowship of Overseas College & University Students (FOCUS)* Club. A promotional

email was also sent to all UNBC Chinese students through the international student office. The second stage of data collection began one week after I put on the advertisements. During this stage, together with random sampling, I also employed snowball sampling. Snowball sampling is usually used when researchers do not have access to sufficient people with the required characteristics (Atkinson & Flint, 2001). Thus, it was the perfect sampling method in the situation I faced. After completing the survey questionnaire, all participants were asked to recommend their Chinese friends or provide information of others who might be interested to participate in the study.

In addition to the participants from UNBC, Mainland Chinese international students were also recruited from CNC. Students eligible for this research were gathered to attend an information session hosted by the English as a Second Language (ESL) program at the college. The purpose, method, and benefits of the research were explained, and thirteen students agreed to participate.

A total of 97 students took part in the research. In order to balance the participants' points of view, this research recruited students from different education levels including ESL, college, undergraduate, and graduate students. Furthermore, efforts were made to balance the participants' gender, resulting in a near 50/50 split of males to females. The study's sample size did not meet the expected number (120 students) because of the low response rate from CNC students. However, as Prince George has a comparatively small Chinese international student population (compare to the big cities in lower mainland, such as Vancouver), the information provided by these samples should be powerful enough to represent the Chinese international students in Northern B.C. Although the exact numbers of Mainland Chinese international students in UNBC and CNC is

unknown due to both schools' confidentiality policies, according to the unofficial information from International Student Office, there were approximately 110 Mainland Chinese students studying in UNBC and 80 in CNC as of summer 2011. While the sample size was not as big as expected, it covers nearly 50% of the Chinese student population in the city. The sample size, therefore, should be able to serve this research well and yield significant findings.

Development of the Survey Instruments

This research employed quantitative methods to collect data by using paper-pen questionnaire surveys. Survey research is the most popular type of research in the social sciences because of its flexibility and efficiency (Muijs, 2011, p.38). By using the survey method, it is possible to study a wide range of research questions without setting up an experimental situation. Surveys also make it easier to generate findings from a small group of respondents at a relatively low cost and effort. In addition, the use of identical questions in each survey allows for comparability between individuals or groups of respondents.

The major points of interest from this study are the students' acculturation level and their quality of life (QOL). Therefore, the questionnaire consists of three parts: an acculturation scale, a quality of life self-report survey, and demographics (See Appendix B). Since open-ended questions are more time-consuming for respondents to answer and for researchers to code and qualify, this study consists exclusively of closed-ended questions except for those designed to collect demographic information.

The first part of the questionnaire is a sociocultural adaptation scale which is composed of 13 items. A portion of the questions are adopted from the *Suinn-Lew Asian Self-Identity Acculturation Scale* (SL-ASIA) (Suinn, Ahuna & Khoo, 1992), while the remainder are from the *Asian American Multidimensional Acculturation Scale* (AAMAS) (Chung, 2004). Participants are asked to rate themselves on how well they have adapted to Canadian culture in terms of cultural identity and knowledge, language, food consumption, and interpersonal relationships. All questions are on a 5-point scale. Low scores reflect poor acculturation to Western/Canadian culture, while high scores imply successful acculturation.

The SL-ASIA scale is designed to measure different aspects of acculturation, including language, social network, behaviour, generation, and cultural identity. Alpha coefficients previously reported for this scale ranged from .88 to .91, which indicated an acceptable level of stability for the instrument (Suinn et al, 1987; Suinn, Ahuna, & Khoo, 1992). The original scale contains 21 items, however five more were added to further classify the research participants into different cultural identity groups in its second version. Later studies support Suinn's assertion that acculturation is not linear and uni-dimensional but orthogonal and multi-dimensional (Suinn, Ahuna, & Khoo, 1992).

The present study adopted four out of the five new items in order to categorize the students into different cultural identity groups. By examining the answers to Q1 and Q2, one can examine whether the student maintains the original value or adopts the host cultural values. If Q1 has "4" or "5" which indicate high Asian value and Q2 has either "1", "2", or "3", then classify this student as Chinese value; b) if Q2 has "4" or "5" and Q1 has either "1", "2", or "3", then classify this student as non-Chinese value; c) if both

questions have either “3”, “4” or “5”, then classify this student as bicultural; d) if the student chooses “1” or “2” for both Q1 and Q2, this student is denying any values and may be alienated from both cultures. The same method can be applied to Q3 and Q4 to classify students into different cultural groups – Chinese, bicultural, non-Chinese, or Alienated.

The remaining questions from Part I of the questionnaire are adopted largely from AAMAS. This scale is designed to assess the acculturation level of Asians with respect to cultural identity, language, cultural knowledge, and food consumption. The original AAMAS has three sub-scales: Culture of Origin, Asian American, and European American. Each sub-scale consists of 15 items and uses a 5-point scale ranging from “not very much” to “very much”. Previous studies have provided strong evidence of the AAMAS’s reliability and validity (Chung, Kim, & Abreu, 2004). In the present study, only the AAMAS-Culture of Origin sub-scale is used, and question and answer options are modified specifically for Chinese students.

The second part of the questionnaire contains 23 questions which are partially adopted from *World Health Organization Quality of Life (WHOQOL) – BREF* (English version) survey questionnaire (WHO, 2004). The WHOQOL-BREF instruments were developed collaboratively by a number of centres worldwide, and have been widely field-tested. It is a self-administered 26-item version of the WHOQOL-100. It consists of 5-point scale questions ranging from 1 (very dissatisfied/very poor) to 5 (very satisfied/very good). There are four domains in the scale: physical health, psychological health, social relations, and environment. It requires that the participants complete the questionnaire based on their recall of their quality of life one month before the survey.

For data analysis, domain scores can be calculated in three ways. The first method sums up the raw scores of constituent items, while the second and third methods transform the raw scores to standardized scores. This study primarily used the first method. The WHOQOL-BREF is reported as valid to use with medical students to assess health-related quality of life (Krageloh, et al., 2011). Other studies suggest that the WHOQOL-BREF produces reliable and valid results (Hwang, Liang, Chui, & Lin, 2003; Ohaeri & Awadalla, 2009). Taking the above references into consideration, WHOQOL-BREF is a suitable instrument to assess quality of life (QOL) in the present study. Regardless, some questions have been replaced to better suit the study's subject. For example, questions related to sex life have been replaced with questions related to school life.

At the end of the questionnaire, four questions were added to collect participants' demographic information, including age, gender, education level, and length of stay in Canada.

Only a carefully designed questionnaire with suitably worded questions will serve research well (Muijs, 2011, p.39). Thus, a pilot test was carried out before data collection began. I recruited ten volunteer Chinese students to complete the survey, which exposed several problems related to the wording of the questions. Based on these results, I simplified the wording of sentences (without altering the meaning of the question) and added translations to certain items which were considered too difficult.

Data Collection

In Canada, all human subject research is guided by the *Tri-Council Policy Statement on the Ethical Conduct for Research Involving Human Subjects* (Panel on Research Ethics, 1998). All research conducted involving human subjects or data collected on human subjects must conform to the *Tri-Council* guidelines. Since this study is designed to use students as subjects, a thesis proposal was submitted to the UNBC Research Ethics Board (REB) for review prior to data collection. In addition, institutional permission was obtained from the UNBC provost office according to the requirements from UNBC REB.

Data collection began right after the REB approved the research. Students who consented to take part received an information letter outlining the researcher's information, the study's purpose and potential risks, and a guarantee of confidentiality prior to their participation. They were also asked to complete and sign a consent form clarifying the voluntary nature of the study (see Appendix D). In order to maximize the response rate, participants were offered access to the results of the study if they completed the questionnaire in full. A portion of the consent form was therefore allotted to gather contact information, with results to be delivered to them by phone or e-mail upon completion of the study.

The survey was carried out in a paper-and-pen form and required approximately 10-15 minutes to complete. Data collection largely took place in the UNBC hallways or food court. These locations were chosen because of their convenience and to attract other

Chinese students' attention in order to increase participation. After two months of data collection, 84 students completed the survey.

The timing of the data collection was also important. Students tend to experience more stress, which can lead to dietary disorder, and physical discomforts, during exam periods (Bradley, 2000; Sun & Chen, 1997; Thomson, Rosenthal, & Russell, 2006; Zhu, 2007). Hence, in order to avoid any bias caused by physical and/or mental health problems which attribute to high academic stress, data were mainly gathered during the first two months of the winter semester 2012 and the first two months of the summer semester 2012.

Another challenge encountered during data collection was a low response rate. A higher than 60% response rate was expected before data collection, however, approximately 40% of students who were informed about the research filled out the survey. It is possible that lack of patience, disinterest in the research topic, lack of time, and unwillingness to disclose personal issues resulted in the low response rate. To solve this problem, I planned to recruit more participants at CNC.

A research proposal was submitted to the CNC Applied Research Ethics Board (AREB) for review. Research approval was issued two months after submission. As the majority of Chinese students attending CNC are in the ESL program, I did set up several meetings with the CNC international education department and the ESL program coordinator to discuss recruitment options. In these meetings, it was decided that an invitation to participate in the research would be announced by instructors in each class, and students would have the right to decline if desired. Forty copies of the questionnaire,

including the information letter and consent form, were prepared for distribution. However, the response rate was very low. Out of nearly 80 Chinese students, only two students showed interest in the topic and completed the survey. As a result, another meeting was held in CNC with the ESL project coordinator to determine a better way to increase the response rate. We decided to hold an information session in CNC to explain the purpose of the research, the methods used, and the benefit to Chinese students. Whereas the in-class announcements were made in English, the information session was held in Mandarin language to encourage understanding and comfort among students. Students were also asked to spread the news to their co-national friends and invite them to participate. After two months of data collection at CNC, a total of 13 Chinese students, including ESL and college students, took part in the study.

Data Analysis

Data analysis started soon after data collection was completed. First of all, I went through all questionnaires quickly to check if all the questionnaires were fully and appropriate completed for further analysis. A total of 97 questionnaires were received, including two uncompleted questionnaires. Altogether 95 surveys were used in the data analysis.

The second step for data analysis was data input and re-check. All the raw data was entered in the Statistical Product and Service Solutions (SPSS) software and Microsoft Excel based on the order of return time. After data entry, I double checked the answers for each participant to ensure the accuracy of the data.

The next step was to calculate the score using Microsoft Excel. In scoring the acculturation, I added up the answers for questions 5 to 12 on the scale of the first sections (question one to four were excluded because they were not used for accessing the acculturation level), and then I obtain a total value for part I. A final acculturation score (Accuscore) was calculated by dividing the total value by eight; hence the score range from 1.00 (low acculturation) to 5.00 (high acculturation). The same method was applied to calculate quality of life score (QOLscore). A QOLscore of 1.00 indicated low quality of life and 5.00 represented high quality of life. Since there were four domains in the second part of the questionnaire, the domain scores were calculated respectively. Questions 13, 20, 21, and 22 belong to physical domain; questions 1, 2, 10, 11, 18, and 19 form the psychological domain; questions 3, 4, 5, 9, 14, and 15 compose the social domain; and the environment domain consist of questions 6, 7, 8, 16, and 17.

The final step was to run appropriate statistical analysis in SPSS to yield results for the current research questions. Descriptive statistics, T-tests, analysis of variance (ANOVA) and Person's correlation were performed. After I gained all the essential results for the current study, I printed them out and proceeded to produce the report.

Chapter Five: Results

The purpose of this study was to investigate the relationship between and factors affecting acculturation levels and quality of life among international students from Mainland China in Northern B.C. Data was collected by distributing survey questionnaires at UNBC and CNC in Prince George. SPSS and Microsoft Excel were used to analyze the data. This chapter presents the data analysis results, including a) demographic information of the sample; b) parametric tests assumptions checking; c) tests of the research questions; d) additional findings.

Demographics Information

The total number of participants in the survey was 97. Two surveys were not fully completed the second part of the questionnaire so they were excluded from analysis. Therefore the number of surveys for the final analysis was 95. Samples were approximately balanced for sex, age, and length of residence in Canada. In all, the average age of the participants was 22.3 years ($SD = 2.29$) with a range of 19 to 33 years. Gender distribution was 47.4% male and 52.6% female. About 32.6% of participants were from English study programs, 57.9% were pursuing bachelor degrees, and the remaining 9.5% were in graduate or higher level programs. The average length of residence in Canada was 25 months ($SD = 15.7$), ranging from one month to over 36 months. Table 1 provides the detailed descriptive statistics of participants' demographic information.

Table 1

Demographics Information of Participants

Demographics	Frequency(N=95)	Percentage(%)
Gender		
Male	45	47.4
Female	50	52.6
Age (Year)		
19	8	8.4
20	16	16.8
21	8	8.4
22	19	20.0
23	22	23.2
24	8	8.4
25	8	8.4
26	4	4.2
29	1	1.1
33	1	1.1
Mean = 22.3		
SD = 2.3		
Education Level		
English Study (ELS/ESL)	31	32.6
Undergraduate/College	55	57.9
Graduate or higher	9	9.5
Time of residence in Canada (month)		
0-3	5	5.3
4-6	10	10.5
7-12	12	12.6
13-24	29	30.5
25-36	25	26.3
>36	14	14.7
Mean = 25		
SD = 15.7		

Parametric Tests Assumptions Checking

Parametric testing is a statistical tool which assumes that data comes from a distribution which has been described by statisticians, and makes inferences about the parameters of the distribution (Field, 2005). Most well-known elementary statistical tests, such as t-tests, analysis of variance (ANOVA), and correlations, are parametric. Different from parametric tests, nonparametric tests are used when data do not follow normal distribution because this types of tests do not rely on any underlying mathematical distribution. Generally speaking, parametric test are more “conservative” and nonparametric test are more “liberal” since it doesn’t required a set distribution to run the tests. If a parametric test was used when the data are not parametric, the results are likely to be inaccurate because the probability of Type I error (find something that isn’t exist) increased. As a result, it is important to check the assumptions of parametric test before carrying out the tests. The assumptions of parametric tests are normally distributed data, equal variance, interval data, and independent data.

The first assumption is the normality of the sample data. It assumes that the data are from one or more normally distributed populations. This assumption may be checked by inputting the data into EXCEL or SPSS and plotting the frequency to look at the distribution. One may assume that the population is normally distributed by eyeballing the sample data. Beyond this approach, some statistical software such as SPSS allows users to plot the histogram with a normal curve in order to check if the data meet this assumption. Figure 1 and 2 provide the frequencies of acculturation scores (Accuscore) ($M = 2.76$, $SD = .487$) and quality of life scores (QOLscore) ($M = 3.17$, $SD = .323$) with a normal curve on top. According to the figure 2 and finger 3, both curves shown on the

histogram are unimodal, symmetric, asymptotic, and have a bell shape, which meet all descriptions of normal distribution. As a consequence, the data of the current study meet the first assumption of a parametric test.

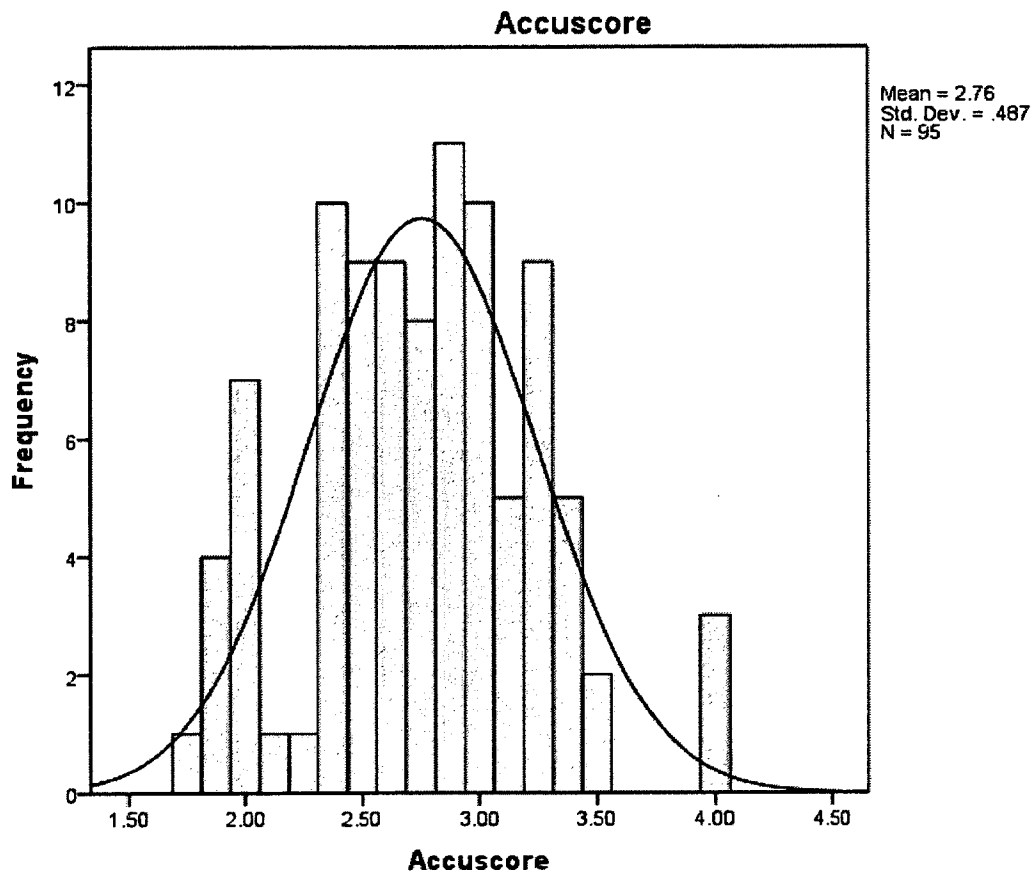


Figure 2 Frequency Distribution of Acculturation Scores of Chinese Mainland Students

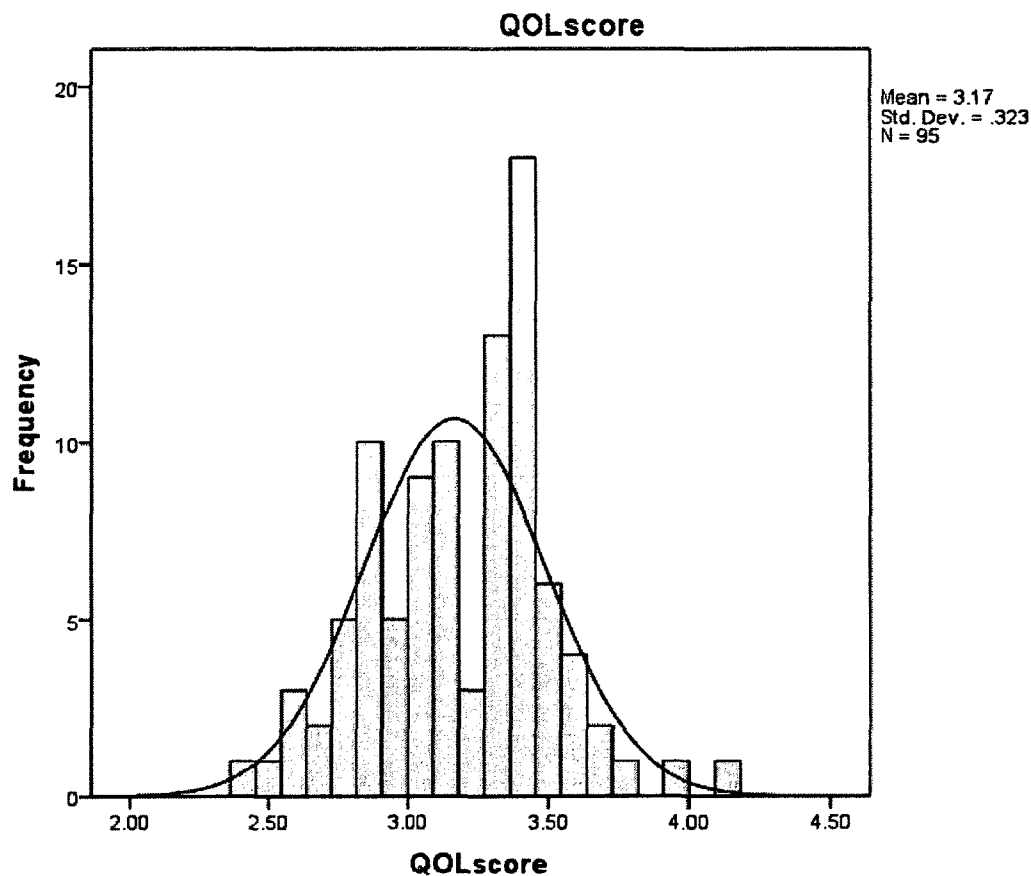


Figure 3 Frequency Distribution of Quality of Life Scores of Chinese Mainland Students

The second assumption is called homogeneity of variance. This assumption means that when analyses go through levels of one variable, the variance of the other should remain the same. In designs which test several groups of participants, this assumption means that each of these groups comes from populations with the same variance. The Levene's test is most commonly used to test for homogeneity of variance in group data analysis (Hurlburt, 2006). This test assesses the hypothesis that the variances in the groups are equal. If a Levene's test result is significant ($p \leq .05$), then one can reject the null hypothesis and conclude that the variances of these groups are significantly different.

Therefore, the assumption of homogeneity of variance is violated. However, if the result of Levene's test failed to show significance ($p \geq 0.05$), one must accept the null hypothesis that the variances are roughly equal and the assumption is tenable (Field, 2005, P.97). In most statistical analysis software, a Levene's test can be examined separately or in conjunction with a parametric test. For example, SPSS can conduct a Levene's test alone (under the option of "Explore"), or find it from the results of several tests including T-tests, one-way ANOVA, and two-way ANOVA. SPSS has incorporated this procedure into most of its parametric tests. Further discussion of this assumption will be provided in the results of statistical tests later in this chapter.

The third assumption requires that the data should be measured at least at the interval level, which means the distance between points of the scale should be equal at all points along the survey. In the present study, all questions were measured by a five-point scale. The difference presented by the change in scores was the same throughout each part of the questionnaire. For example, the first half of the questionnaire aimed to measure the acculturation level of Chinese students. In this section, the lower score indicated a lower acculturated level while the higher score represented a higher acculturated level. The current study does not violate this assumption.

The last assumption of parametric tests is that data from different participants must be independent. This means that the behaviour of one participant cannot influence the others. In the present study, all participants were asked not to confer with each other (unless they required interpretation assistance) and then were asked to complete the questionnaire on their own. Thus, this assumption is tenable in the current study.

Analysis of the Research Questions

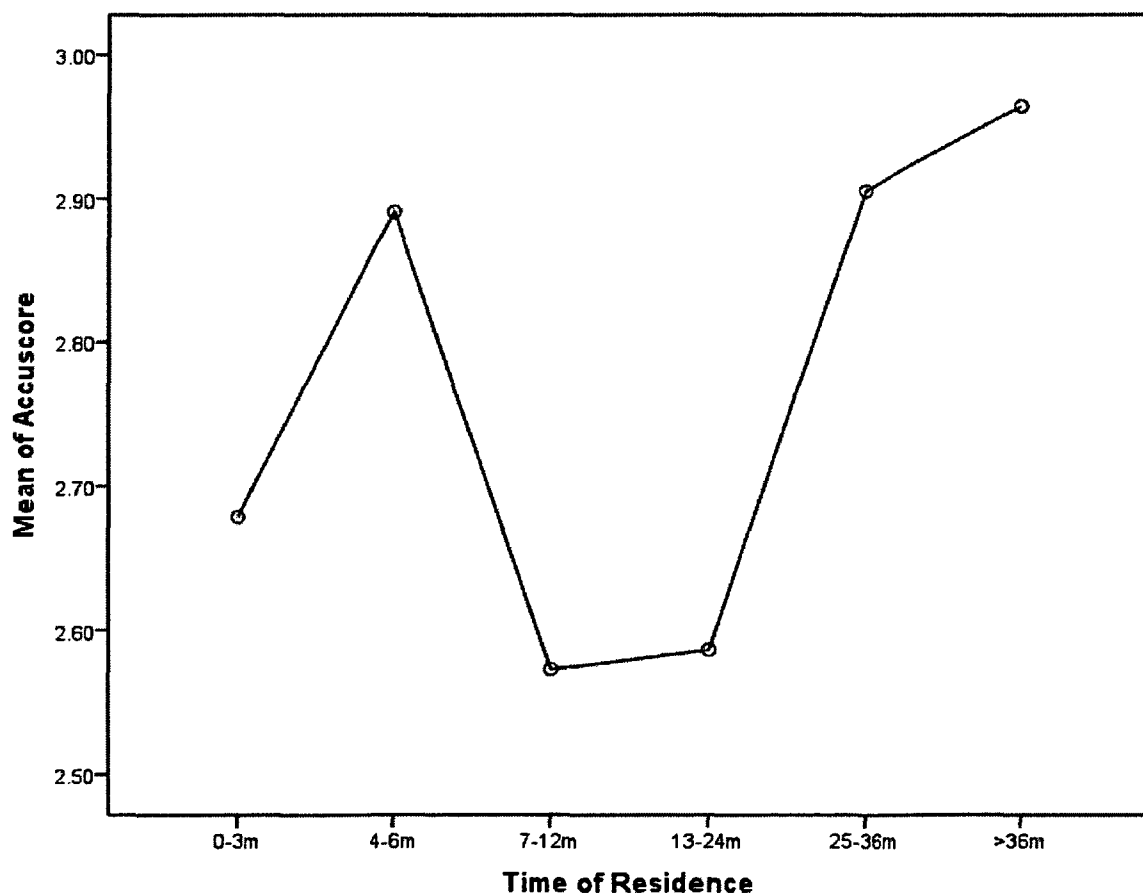
Research question one. Whether the length of stay in Northern B.C. influences Mainland Chinese students' acculturation to life in Canada was the first research question. The Accuscore was used as a dependent variable for the estimation of the change in adjustment over time. Participants were assigned to different groups based on their time of residence in Canada. Altogether, there are six groups: entry to three months, four to six months, seven to 12 months, 13 to 24 months, 26 to 36 months, and > 36 months. ANOVA was conducted to test this question. As discussed above, an assumption of homogeneity of variances need to be checked before carrying out the test. According to the result of the Levene's test, there is no significant difference between the variances of each group, $F(5, 89) = .241, p > .05$. Therefore, the null hypothesis was accepted and ANOVA is reliable for use in this research question. As can be seen from Table 2, the results of ANOVA indicated a significant change in students' acculturation over time, $F(5, 89) = 2.341, p < .05$.

To further investigate where these significant differences occurred, Post hoc testing was conducted. Since this ANOVA test did not violate the assumption of homogeneity of variance and the overall result was significant, the least-significant difference (LSD) pairwise comparison seemed to be the appropriate Post hoc test to run in this situation. The result of LSD revealed that the greatest amount of adaptation difficulties were experienced by students who have lived in Northern B.C. for seven to 12 months and 13 to 24 months, but there were no significant differences across the entry to three months, four to six months, and >36 months subgroups (Figure 4).

Table 2

One-way ANOVA Result (Time x Accuscore)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.588	5	.518	2.341	.048
Within Groups	19.674	89	.221		
Total	22.262	94			

*Figure 4* Mean Plots of Chinese Mainland Students' Accuscore over Time

Research question two. Whether there is a gender difference related to the acculturation process of Chinese Mainland students in Northern B.C. was the second question examined in this research. To explore this question, the independent T-test was used. The equality of variances was checked before carrying out the T-test. The Levene's test showed the variance between male and female groups is significantly different, $F(93) = 6.273, p < .05$. This means the assumption of homogeneity of variance is violated. In this case, a violation does not necessarily mean that the T-test cannot be used to analyze the data. There are several methods to overcome this, such as not using the pooled estimate for the error term of the t-statistics, and making adjustments to the degrees of freedom using the Welch-Satterthwaite method (Laerd Statistics, 2013). Instead of requiring users to fix the data manually, SPSS runs all of these adjustments in the background and simply labels the values for the test statistics with *Equal variances assumed*, and *Equal variances not assumed* without stating the underlying tests used (Table 3). Therefore, in an independent T-test, when the result of the Levene's test happens to be significant, the t value under *Equal variances not assumed* should be reported instead of the one under *Equal variances assumed*.

The current test used gender as independent variables and acculturation scores as dependent variables. According to Table 4, the average score of acculturation of male participants ($M = 2.78, SD = .56$) is slightly higher than female participants ($M = 2.74, SD = .42$). However, there is no significant difference found, $t(80.693) = .343, p > .05$. To sum up, according to my research there is no difference in acculturation processes between male and female students who came from Mainland China in Northern B.C.

Research question three. Research question three in the current study was whether the quality of life for Chinese Mainland students increases as adaptation to Canadian life increases. Correlations between Accuscore and QOLscore were examined to determine whether there is a relationship between acculturation and quality of life in Chinese Mainland students in Northern B.C. Since the direction has been specified in the research question (an individual who reports a high score in acculturation should also gain a high score in quality of life), the one-tailed Pearson's correlation coefficient test is suitable for this examination. According to the result (Table 4), a significant correlation between acculturation score and quality of life score was found, $r = .183, p < .05$. These results firmly indicate that higher acculturation levels result in better quality of life.

Factor analysis was conducted to examine which acculturation factors affect the students' quality of life, and conversely, which domain(s) of quality of life influence the acculturation process. Acculturation factors include language ability, cultural knowledge, food preferences, and social network. Domains of quality of life include physical, psychological, social, and environment domains. As I did not predict a direction of the correlation, 2-tailed tests were conducted. In the first test of factor analysis, quality of life scores served as dependent variables and the factors of acculturation served as independent variables. As can be seen in Table 5, a significant positive correlation was found between quality of life and language ability, $r = .268, p < .01$. The result implied that the students' language ability does indeed have an impact on their quality of life and the effect is evident; however, the remaining factors (cultural knowledge, food preferences, and social networks) did not show any significant influences.

Table 3

Independent T-test Results (Gender x Accuscore)

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Accu score	Equal variances assumed	6.273	.014	.348	93	.728	.03500	.10047	-.16451	.23451
	Equal variances not assumed			.343	80.693	.732	.03500	.10202	-.16800	.23800

Table 4

Correlations of Acculturation Scores and Quality of Life Score

		Accuscore	QOLscore
Accuscore	Pearson Correlation	1	.183*
	Sig. (1-tailed)		.038
QOLscore	Pearson Correlation	.183*	1
	Sig. (1-tailed)	.038	

* Correlation is significant at the 0.05 level (1-tailed).

With regard to the relationship test between quality of life domains and acculturation processes, the former served as independent variables and the latter as dependent variables. Table 6 provides a detailed result. According to the Pearson test, acculturation scores are significantly related to the psychological domain in a positive way, $r = .205$, $p < .05$. However, no significant relationships were discovered when comparing the other three domains to acculturation scores. The findings indicate that the students' psychological health has a positive influence on their cultural adaptation, which means the better psychological health they have, the better they can adjust to cultural changes.

Table 5

Correlations of Acculturation Factors and Quality of Life scores

		QOLscore	Language Ability	Culture Knowledge	Food preference	Social network
QOLscore	Pearson Correlation	1	.268**	.132	-.195	.032
	Sig.(2-tailed)		.009	.202	.058	.758

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 6

Correlations of Quality of Life Domain and Acculturation scores

		Accuscore	Physical Domain	Psychological Domain	Social Domain	Environment Domain
Accuscore	Pearson Correlation	1	.098	.205*	.078	.051
	Sig.(2-tailed)		.343	.046	.451	.624

* Correlation is significant at the 0.05 level (2-tailed).

Research question four. The fourth research question was focused on whether the length of stay in Canada influences Chinese Mainland students' quality of life in Northern B.C. Again, the assumption of homogeneity was examined before running the ANOVA. Results of the Levene's test showed that there is no significant difference between the variance of each group, $F(5, 89) = .316, p > .05$. Therefore, the null hypothesis that the variances in each time period group are fairly similar was accepted. Similar to research question one, ANOVA was put to use. Time of residence served as independent variables and scores of quality of life served as dependent variables. By comparing the means of quality of life scores at different time periods, test results indicated that there were significant changes in students' quality of life over time, $F(5, 89) = 5.70, p < .05$ (Table 7).

Table 7

One-way ANOVA Results (Time x QOLscore)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.383	5	.477	5.700	.000
Within Groups	7.442	89	.084		
Total	9.825	94			

The following Post hoc analysis revealed that the mean score of subjects in the 0-3 month time period was significantly lower than the other five groups, and subjects in the >36 month time period scored significantly higher than any other group. Figure 5 shows the mean plots of students' quality of life scores during different time periods. The line which links the means suggests that, even though there was a slight drop between 7-12m and 13-24m, the students' overall quality of life trends upwards over time.

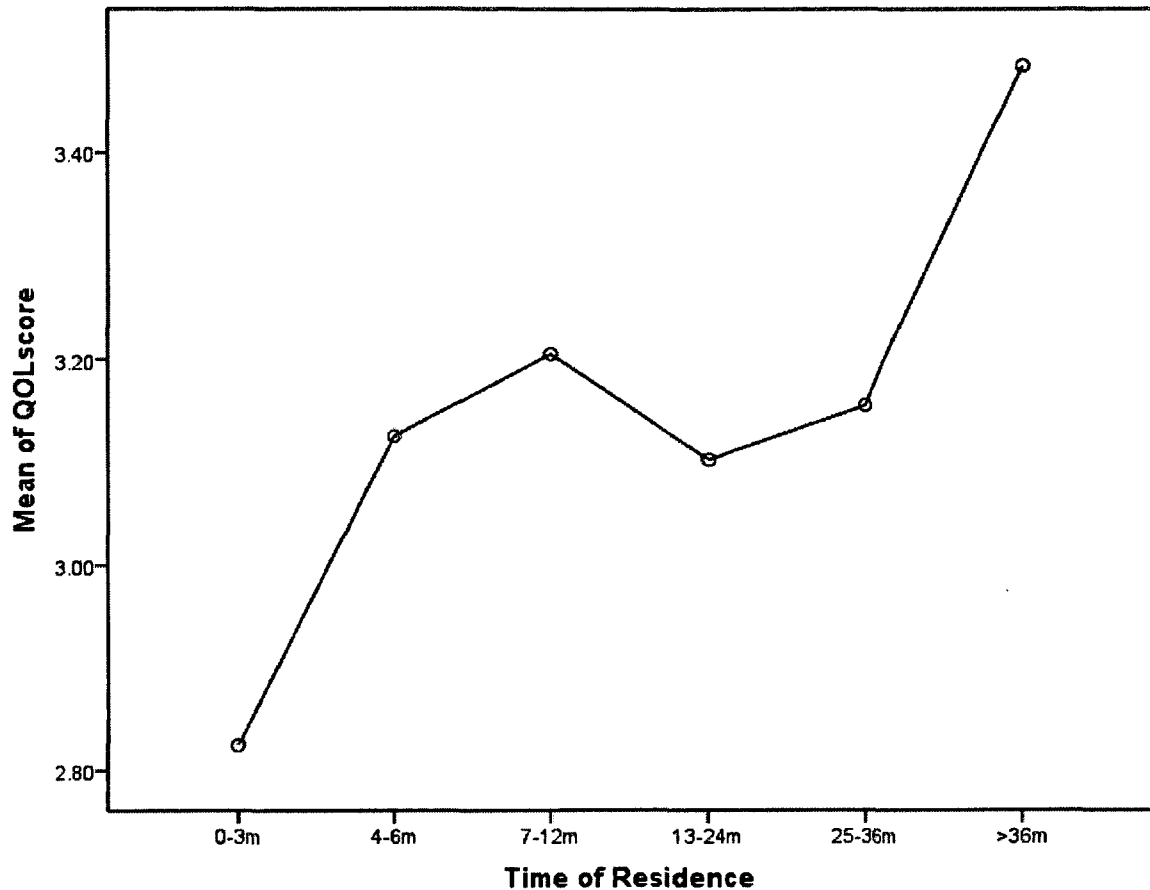


Figure 5 Mean Plots of Chinese Mainland Students' QOLscore over Time

Research question five. Research question five sought to answer whether there are significant differences in quality of life between male and female Chinese Mainland students in Northern B.C. Quality of life score means in both gender groups were calculated and compared using independent T-tests. The Levene's test for homogeneity of variance indicated that the variances are not equal in these groups, $F = 9.887$, $p < .05$. Thus, the t value under *Equal variances not assumed* was the true result value for the current test.

In this comparison, gender served as the independent variable and quality of life scores served as the dependent variable. Overall, the score of quality of life of female participants ($M = 3.09$, $SD = .38$) is lower than male participants ($M = 3.23$, $SD = .24$), and a significant difference was detected, $t(74.432) = -2.039$, $p < .05$. In summary, quality of life is significantly different between male and female Chinese Mainland students in Northern B.C.

Further factor analysis was conducted to find out where the gender differences located in the domains of quality life. Gender served as the independent variables and domain scores served as the dependent variables. Results in Table 9 showed male and female students scored significantly different in the psychological domain [$t(80.676) = -2.44$, $p < .05$] and social domain with [$t(72.766) = -2.864$, $p < .05$]. However, no significant difference was identified in the physical and environmental domains.

Table 8

Independent T-test Result (Gender x QOLscore)

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
QOL score	Equal variances assumed	9.887	.002	-2.083	93	.040	-.13596	.06528	-.26560	-.00632
	Equal variances not assumed			-2.039	74.432	.045	-.13596	.06669	-.26884	-.00308

Table 9

Gender Difference in Four Domains of Quality of Life

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Physical domain	Equal variances assumed	.697	.406	.905	93	.368	.08833	.09761	-.10550	.28217
	Equal variances not assumed			.899	88.017	.371	.08833	.09830	-.10702	.28369
Psychological domain	Equal variances assumed	2.015	.159	-2.075	93	.041	-.18978	.09144	-.37137	-.00819
	Equal variances not assumed			-2.044	80.676	.044	-.18978	.09286	-.37455	-.00500
Social domain	Equal variances assumed	6.659	.011	-2.930	93	.004	-.28032	.09567	-.47029	-.09034
	Equal variances not assumed			-2.864	72.766	.005	-.28032	.09789	-.47542	-.08522
Environment domain	Equal variances assumed	.040	.843	-.566	93	.573	-.05867	.10368	-.26455	.14722
	Equal variances not assumed			-.565	90.931	.574	-.05867	.10392	-.26510	.14777

Additional Findings

The first four questions in the questionnaire Part I were designed to assess students' cultural values and which cultural groups they belong to according to their preferred associations. Results showed that more than 60% students indicated they possess bicultural or non-Chinese values; while only 39% of them said they prefer to associate with non-Chinese. Four per cent of participants reported they do not believe in either Chinese and Western values and 2% of them said they do not belong to any cultural groups.

The last question of section II in the questionnaire was designed to collect data regarding how Chinese Mainland students in Northern B.C. cope with stress. Eleven options were provided and the participants were allowed to more than one option as long as the method applies to them. Table 9 shows the preference of coping methods of Chinese students. More than 60% of participants reported that they would choose avoidant coping methods, such as playing video games, using alcohol or isolating themselves to deal with stress. Roughly 37% of students turned to active coping strategies when facing stress. In terms of gender difference, male students tend to choose active coping methods while female students are more likely to choose avoidant coping methods.

Table 10

Frequency of Chinese Mainland Students' Stress Coping Activities

Coping Methods	Frequency		Percentage (%)
	Male	Female	
Play video games	21	5	26.32
Call family or friends in China	11	22	34.74
Watch Chinese movies	10	10	18.95
Pray to God	10	4	14.74
Isolate and cry	1	8	7.37
Alcohol	14	2	16.84
Lose temper with friends	2	4	6.32
Study	2	3	5.26
Engage in positive thinking	12	16	27.37
Exercise	15	10	28.42
Other (sleep, shopping, party, music)	3	14	13.68
Total			
Acting coping methods	39	33	36.18
Avoidant coping methods	62	65	63.82

Chapter Six: Discussion and Conclusion

The main purpose of this study was to examine the current situation of acculturation and quality of life among Chinese Mainland students living in Northern B.C. Despite the increasing popularity of interdisciplinary research on cross-culture issues and health related topics, little research has been conducted testing both acculturation and quality of life by directly studying Chinese Mainland students. In this study, I focused on exploring the variations in and the relationships between acculturation and quality of life over time, as well as the gender differences in both variables. In the following chapter, I will interpret the results of the research questions and discuss the limitations of the study. Practical implications and recommendations for further researches will be provided at the end.

Variations in Acculturation over Time

Consistent with previous research on cross-cultural adjustment over time, the results of this research indicated that there are significant differences in acculturation of Chinese Mainland students as time goes on. However, the results showed a different adjustment pattern of Chinese Mainland students in Northern B.C., compared to those previously described by academics. Here, the pattern follows a semi-U shape, rather than a traditional “U” or “J” shape. Chinese students’ acculturation levels elevated between entry and six months, but decreased dramatically between six and 12 months after their arrival. Students who lived in Canada for seven to 24 months reported having the most difficult time in acculturation. However, things improved after two year of residence in Canada as the acculturation level rose rapidly in the 25-36 months group. Finally, there

was an incremental increase in acculturation in the >36 months group, but this was a non-significant rise compare to the 25-36 months group.

In this section, I re-present the figure of UCT and the mean plots of Chinese Mainland students' acculturation level over time. According to Lysgarrd (1955), there are four stages in cultural adjustment: honeymoon, culture shock, adjustment, and mastery. The current findings are presented in Figure 4 below. The results show that students entered the honeymoon stage between three to six months after their arrival in the new environment, which is three months later than the model predicted. The culture shock stage began after seven months and lasted from half a year to two years, which was nearly four times longer than in the model. After 24 months of residence, the adjustment stage appeared as evidence of the students' increasing acculturation levels. When time of residence reached three years and more, the mastery stage emerged. As the final two stages were roughly consistent with the model, the following discussion will focus on the honeymoon and culture shock stages.

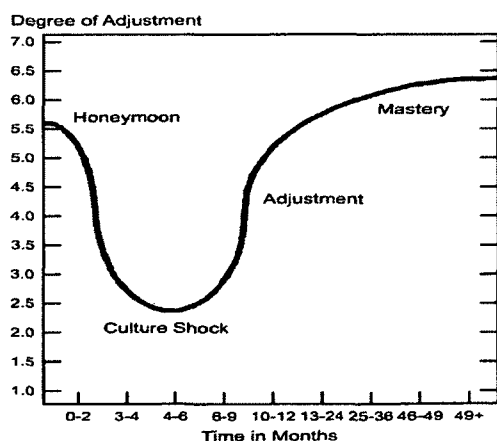


Figure 1 U-curve of Adjustment Theory

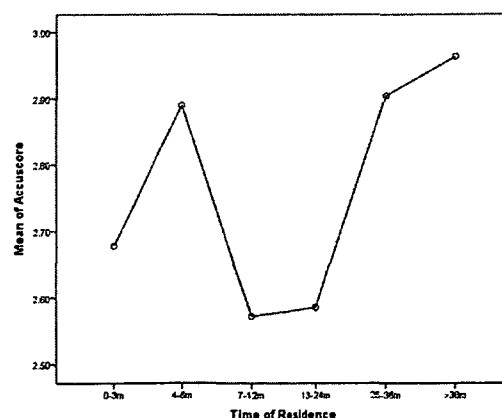


Figure 4 Chinese Mainland Students' Acculturation over Time

The major difference between the current study and the classic UCT model is an elevation in acculturation from three to six months, where the UCT predicts a decreasing trend. A possible explanation for this phenomenon is that participants in the four to six month group have more time and opportunity to enjoy the new culture than those in the first group. All of the participants in these two groups were enrolled in the ESL program. As opposed to undergraduate courses, ESL study is relatively easy and has fewer academic pressures. As a bridge between cultures, ESL classes not only provide English training to students but also immerse them in domestic culture and traditions. In addition, multi-national classrooms offer Chinese students extra chances to interact with students from different cultural backgrounds, helping them adapt to the new culture. While participants in the zero to three month group were also in the ESL program, it is likely that they struggled more with the overwhelming changes in their surroundings than the four to six month group.

It is not surprising to see a sudden drop of acculturation in the 7-12 month group due to culture shock. Culture is the sum of people's behaviours, beliefs, values, and standards, and develops as they live together and influence one another. Additionally, culture assures people's living in certain physical and environmental standards (Wan, 2001). Consequently, when people move from their native culture to an unfamiliar one, culture shock occurs as the supports they used to take for granted are no longer available. Students in this group were mainly attending undergraduate or graduate study, with few enrolled in ESL programs. As time progressed and they entered higher levels of education, they began to feel the pressure of school workloads and the acculturative stress of the academic setting. Indeed, Chinese students have difficulty adapting to academic

standards in Canada due to language difficulties and the different teaching and learning styles between China and Canada (Sun & Chen, 1997). The Canadian teaching style is more liberal and encourages critical thinking, while the Chinese is relatively conservative and sticks to the textbook. As a personal experience, I attended an undergraduate level course during my master's study in Canada. Even though I had lived and taken courses in the country for two years, I still found it extremely difficult to work with classmates (most of whom were Canadians) and felt culturally alienated in group projects. When considering that education is the biggest reason Chinese students go overseas, and the amount of energy they expend to make the experience worthwhile, it is understandable that the dramatic drop in acculturation during this period was mainly caused by the acculturative stress from academic adaptation.

It is noticeable that data in this research shows that the culture shock stage was prolonged in Prince George. According to the UCT, culture shock is expected to vanish within one year of arrival. However, the results indicate that Chinese students were still experiencing culture shock after two years of living in Prince George. Culture shock can be caused by misunderstanding of the values, beliefs, and behaviours in the host culture, or by mistakenly using native culture to interpret, judge, and behave in the host culture (Wan, 2001). As a collectivist society, China has a markedly different cultural structure compared to Canada's individualism. According to Nisbett (2001), people from collectivist societies tend to be holistic and place value on behaviours promoting in-group interdependence and in-group goals. In contrast, people from individualist societies are more likely to be analytic and endorse behaviours related to independence from the in-group and to individual goals. Imagine a scenario where a Chinese student is assigned to

a group project with Canadian classmates. The non-Chinese students agree to finish their own sections and combine the results before submission, while the Chinese student prefers to write the whole thing together. In this case, the Chinese student might interpret the Canadian classmates' behaviour as irresponsible, whereas they see it as the most mature and efficient way to accomplish the project. Such inherent incompatibility in two cultural views may be responsible for prolonging the culture shock stage in the present sample as Chinese students adapt with difficulty to the Canadian culture.

Another interest underlying this research question was to test the existence of the U-curve model within the Chinese international student population in Northern B.C. The controversy of whether the UCT is a reliable framework in cross-cultural study has been in debate for a long time. Colleen Ward, a famous scholar in cross-cultural studies and co-director of the applied cross-cultural research centre at Victoria University in Australia, has sought to reject the UCT by putting it on trial. Her studies indicate that sociocultural and psychological adjustment problems were at their highest level upon entry to the new culture for international students in New Zealand (Ward et al, 1998). Time of residence was negatively and significantly correlated to these two factors, resulting in decreased sociocultural and psychological adjustment problems experienced by students. No hints from her study implied an upward or deteriorated phase in students' cultural adaptation process. Indeed, Ward's results were not in line with the U-curve model at all. She suggested more promising conceptual perspectives such as cultural fit theory, the big five personality model, and stress and coping theories that should be further investigated in cross-cultural field (Ward et al, 1998; Ward, Leong & Low, 2004). Other scholars have challenged the UCT by demonstrating a "J"-shape curve in

adjustment over time. Nash's (1991) research suggested that psychological adjustment (anxiety) of overseas students resulted in a flat "J" pattern as time elapsed. This test confirmed that there was no "U" pattern fluctuation, simply an increase in students' psychological adjustment over time.

Indeed, UCT is fading out from cross-cultural studies in recent years, replaced by more comprehensive theories such as social cognitive, self-efficacy, and cultural distance theories, among others. This is, however, not to say that UCT has become obsolete for describing international students. Indeed, the model certainly describes my adaptation process and those of some ex-international students who have read my proposal. What is more, the present study yielded a "semi-U" shape acculturation pattern of Chinese international students in Northern B.C. Despite the fact that numerous researchers have sought to disprove the universality of the U-curve model, the results of this study (along with others which support the UCT) confirm my assertion that the model is still of value for basic science and exploratory research (Klineberg & Hull, 1979; Markovizky & Samid, 2008; Nash, 1991; Ponizovsky, Ritsner & Modai, 2000; Ward et al, 1998; Wong-Rieger & Quintana, 1987).

There is an interesting finding from this study worth mentioning. When asking students to self-report their perceived cultural values, over 60% of students indicated that they hold a bicultural value, which combines both Chinese and Canadian cultural values. However, only less than 40% students could be classified in to the non-Chinese group according to their association preferences of ethnics. This finding supports that the acculturation process is not following a linear, uni-dimensional model but a multi-dimensional one. Early research on acculturation orientations suggested acculturation as a

uni-dimensional model. An Individual who is acculturating to a new environment can only either adopt the new culture or retain the original one. A later study proposed an different idea. According to Berry's bi-dimensional acculturation model, acculturation should be multi-dimensional (Berry & Sam, 2006). There are four kinds of acculturation outcome. First, integration, which indicates the individual maintains the culture of origin and simultaneously adopts the host culture. Second, assimilation, which means the individual puts aside the original culture and willingly adopts the host culture. Third, separation, which implies the individual persist with their native culture and ignores the host culture. Fourth, marginalization, which suggests the individual accepts neither the original culture or host culture.

In this case, we can see Chinese students maintain their self-identity and culture via socialization with other Chinese. Nonetheless, they start to accept or some of them may have already adopted Canadian cultural values to some extent. Bearing the acculturation outcomes in mind, I conclude that Chinese students are gradually acculturating to the Canadian culture in a positive way. However, due to the limited information provided from the questionnaire, this study cannot arrive at any conclusion about whether the students are integrating or assimilating to the Canadian culture.

Gendered Variations in Acculturation

One of the purposes of this research project was to determine whether there were any differences in acculturation between male and female Chinese Mainland students. The results found that male students scored higher on acculturation than females, yet no statistical significant results were found. This supports the null hypothesis that there is no

gendered difference in acculturation among Chinese Mainland students. This finding is contrary to previous research, which implied that female international students are more likely to have difficulty adapting than their male counterparts in terms of social network and academic performance (Bang, 2009; Hanassab & Tidwell, 2002; Li, 2002).

This focus of the research was inspired by traditionally held views of gender roles in China. According to gender role theory, individuals learn and develop their attitudes and behaviours from the socialization process in their own cultures. This learning process can happen within an individual's family, between peers, and through social networks (Gustafson, 1998). In particular, the process of socialization plays an important role in forming an individual's self-identity, especially in terms of gender role development and expectations (Bang, 2009). Consequently, this theory predicts that male and female individuals will behave differently, and develop different skills and attitudes. Chinese culture is typically male-centred, and men are viewed as superior to women. It generally designates men as the family supporters and women as the caregivers. Chinese women are expected to stay home and take care of the family. Although the participants in the current study moved from mainland China to Canada and have spent a long time pursuing education, they may have brought the traditional Chinese gender role expectations. From this, we can infer that female Chinese students should have a very different experience in acculturation compared to male students. Why, then, do the results not support this hypothesis?

One potential explanation for the lack of significant gender differences on acculturation is that Canadian society provides more possibilities for female Chinese students in terms of education and careers. Social reforms, increasingly open government

policy, and a booming economy have elevated the status of Chinese women in recent years; however there are still many areas where their participation is not widely accepted. While they are beginning to fill the traditional roles of males and have greater control over their own futures, the old views are still strong in many areas. For example, no female governors have been nominated to the Committee of the Communist Party of China, while only four have become provincial premiers since the founding of the new China since 1949. In these and many other situations, I believe that the traditional Chinese views on gender are still largely affecting the mainstream culture. In contrast, Canada opens all opportunities for women. Take government positions for example, as of 2012, six out of 13 provincial and territory premiers are female in Canada. Female Chinese students may find many possibilities for their future in Canada which are not available in China. In this case, they may have more courage to break through the traditional gender role and its expectations, as well as to adapt themselves to the new culture in order to prepare for a brighter future.

Another possible reason for the result is that Canadian society is dedicated to promoting gender equality which provides males and females equal access to education, work, and social experiences. Gender equality also expects equal performance from academic, work, and social duties between genders. In this situation, both male and female Chinese students are likely to have similar concerns in terms of acculturation because of the equalization, which leads to a non-significant difference in acculturation score between two genders in the current study.

A third potential reason that leads to this finding is that Chinese students regardless of their gender come from the same socioeconomic class (SES). As mentioned

in the earlier chapter, tuition fees for international students in Canada are twice, sometimes triple, as those for domestic students. Even though the Chinese economy is developing rapidly in recent years, annual income for urban residents was around 22,000RMB, which is equal to approximately 3,600CAD which is fairly low compared to the Canadian annual income (The Central People's Government of the People's Republic of China, 2012). From the data one can infer that to support a child to study abroad is not an easy task for an average income Chinese family. Despite this we cannot deny that some Chinese students study overseas with financial supports from their home country or host school. I would boldly make an assumption that most of the Chinese students studying abroad come from a family with a high SES. Previous studies pointed out that SES has a significant positive relationship with acculturation level (Farver, Bhadha, & Narang, 2000; Shen & Takeuchi, 2001). Additionally, when examining the SES and acculturation of immigrants, the results showed that SES predicts and acts as a mediator for acculturation stress (Yoon et al, 2012). Some may argue that international students' social status should not play an important role in their acculturation since SES is related to the factors which are not relevant to school lives, such as one's work experiences, social position, income, education level, and occupation. Indeed, students' current social status may highly depend on their parents' social status; however, their expectations of their future social status are profoundly affected by their parents' SES. For instance, a successful business man's son will not expect himself to be a farmer when he grows up; the daughter of a parliamentarian may wish to work in the political field in the future. This view point is proved by a recent study which suggested that college students' expected social status is correlated to their level of acculturation (Yoon et al, 2012).

Therefore, given the assumption that most of the Chinese students in this study come from a comparatively high socioeconomic class, it is not surprising to find out there is no difference between the two genders in terms of acculturation.

Relationship between Acculturation and Quality of Life

Consistent with previous findings (Yang & Wang, 2011), the overall acculturation level of Chinese Mainland students in Northern B.C. was significantly associated with their quality of life. Further factor analysis revealed that language proficiency is helpful in promoting a high quality of life in the host country, while successful acculturation favours psychological health. The latter finding is also similar to the results from previous studies on a variety of worldwide immigrant populations, in which depression correlates with low levels of acculturation (Kim et al, 2004; Parkers et al, 2005).

The possible reason lying behind these significant correlations is evident. According to Lee, Koeske, and Sales's 2004 study, stress caused by the acculturation process is strongly correlated to international students' mental health. When a student's level of acculturation reaches a certain point, the buffering effect of social support occurs which mitigates negative mental health symptoms and physical health problems. Why does the buffering effect of social support only occur when the student's acculturation level climbs to a certain point, instead of showing up at onset? Lee and his colleges did not give further explanation on this point. It is possible that a student requires a certain mastery of the host language before they can access local resources which aid in resolving health problems. Therefore, as a student's level of acculturation increases, the more social support they receive, leading to better psychological and physical adjustment.

Since acculturation is elevated as these three quality of life domains (physical, psychological, and social) are increased, it is reasonable to conclude that quality of life is positively correlated with acculturation.

Variations in Quality of Life over Time

As discussed above, the change in students' acculturation levels lead to variations in their quality of life. What does this variation look like? Did the quality of life change along with the student's length of residence in Canada? Again I assigned the students into six groups based on their length of residence and compared to their QOLscore. The results confirmed that there were significant differences in Chinese Mainland students' quality of life over time. Their QOLscore increased enormously from entry to six months of residence which indicated the students were experiencing a great improvement in life quality during this period. A small increase emerged in the following group, indicating that students still experience gains in quality of life from six months to a year of residence. However, the change was not as great as the previous groups. Surprisingly, a decline in QOLscore was found in the 13-24 month group. The average score dropped from 3.20 to 3.10, implying that students were experiencing a relatively low life quality during their second year of residence. It is important to note that this lower quality of life is still significantly higher than that of the entry to three month group, and does not indicate a poor lifestyle. Students began seeing a larger improvement in their third year of living in Prince George, and a dramatic increase can be seen in the >36 month group.

According to the Post hoc test, the QOLscore of the entry to three month group was significantly lower than any other group, while that of the >36 month group was

significantly higher than the others. There was no significant difference between the four to six month, seven to 12 month, 13 to 24 month, and 25 to 36 month groups.

What factors lead to these fluctuations? Contrary to acculturation, variation in quality of life has not been investigated in reference to time of residence. There is, however, related work which examines the mental health fluctuations of individuals during cross-cultural transition. Previous studies confirmed an increase in international students' acquisition of social knowledge over time (Armes & Ward, 1989; Ward et al, 1998). Ward's hypotheses may not support the first question in the present study, but they seem to offer insight into the current one. According to her research, international students acquire more knowledge of their host country with continual exposure to it. Therefore, as Chinese students gain a greater understanding of Canada and Northern B.C., some of them are more likely to develop favourable attitudes towards the community. We can see this as a positive change in their psychological and social domains. What is more, Canada has better water and air quality, and due to the low population density, it also has vast space for living and outdoor activities compared to mainland China. All of these lead to a higher score in the environmental domain. Consequently, the overall QOLscore presented an upward trend (*Figure 5*). A possible reason for the slight downward curve between the 7-12 month and 13-24 month groups is the weather was affecting their quality of life since the data collection was carried out in winter.

Furthermore, if quality of life is related to acculturation, why is the QOLscore means plot (shown in *Figure 5*) different from the Accuscore results? Unlike acculturation, judgement of quality of life must take the environmental domain into account. This category usually contains measurements of objective conditions which are

out of the individual's control, such as weather, air and water quality, and public facilities. Therefore, the QOLscore and Accuscore curves should not be expected to follow the same path, despite the measurements for acculturation and quality of life sharing some common indicators.

Gendered Variations in Quality of Life

The final goal of the present study was to examine the differences in quality of life based on gender. The results found that females scored lower on the overall quality of life score than their male counterparts, supporting the assumption that there are gendered differences in quality of life among participants. Further factor analysis uncovered differences in the psychological and social domains.

The findings which suggest that female students experience more problems in the psychological domain is in line with previous studies which found that female international students were more likely to have higher levels of stress than their male counterparts (Bang, 2009). As mentioned previously, different cultures develop unique gender role expectations. In Canada, female Chinese students face multiple stresses as they must meet two different gender role expectations: one from their co-national friends and family, and the other from the host society. Some may argue that male Chinese students are facing the similar situation, as they also need to fulfill the expectations from both Chinese and Canadian gender role. A potential explanation to this is due to the male students may already used to the higher expectation from Chinese traditional gender role, they, therefore, find it less stressful to adjust their social behaviours physically and psychologically in order to reach the expectations than their female counterparts. In

addition, many international students study in Canada not solely for their own benefit, but for the betterment of their families. If the student fails to achieve their academic goals, they may bring shame to their entire family. According to Chinese traditional gender roles, study is reserved only for males; it may therefore bring greater pride to the family if a female student succeeded in gaining a degree. In order to save the family's face, female students may spend more time and work harder to succeed in academic settings, which may aggravates their stress.

The findings show female students scoring lower than males in the social domain were similar to those in Li's 2002 study. She asserted that male Chinese students were closer to and felt more connected with their friends than females. Again, these behavioural differences can be explained by gender role expectations as female students are likely to spend more time at home, taking care of themselves, their partners or families who live with them. Furthermore, males and females tend to see social relationships in a different way. As stated by Misra and Castillo (2004), women may have a higher tendency to compete with their peers, leading to greater stress and anxiety than seen in men. This study brings to mind a popular Chinese saying: *A woman's biggest enemy is herself, because there is always an imaginary enemy living in her brain.* Woman compete more with their peers because they may view other women with suspicion due to their own biases and assumptions. I consider these relationships unhealthy and not a positive way to connect with others. With Misra's analysis in mind, it was not surprising to see female students in the present study lagging behind men in social quality of life.

It is surprising to find that there was no difference in physical domain between female and male Chinese students, which was opposite to my perception for the outcome. Prior studies in effects of acculturation on immigrants' health proved that women immigrants experience more health problems due to the great social isolation and greater conservatism within traditional gender roles (Ghuman, 2000; Shin, 1994). In addition, research in non-immigrant women's health has confirmed that stress levels are linked to the length of a woman's menstrual cycle (Ferin, 1999). Women under high levels of pressure or in situations which require adjustment to new demands often have a longer than average cycle (Ferin, 1999; Harlow & Matanoski, 1991).

I expected the health condition of Chinese female students in Northern B.C. to be in line with the previous findings regarding female immigrant population. However, this study did not show any support for my assumption. Why? There are a few potential explanations. First of all, working female immigrants have a higher probability to sustain occupational injury than international students. This may be because students' lives are mainly between home and school and their living environment is comparatively safer than that for working female immigrants. Secondly, due to lack of language competency, many female immigrants are forced to accept low paying jobs despite having high levels of education (Lee, Sobal, & Frongillo, 2000). For those who live in a country that does not provide public health care insurance, financial barriers, compound with cultural barriers (e.g. language barriers), and may greatly affect immigrants' health condition in terms of seeking for health care service. Nevertheless, international students in B.C. are covered by the Medicare program as long as they register for the *B.C. Medical Service Plan* and pay the monthly fee. Therefore, with an easy access to health care service,

differences in physical health between two genders of Chinese students may be minimal. Third, as time of residence in the host country proceeds and acculturation goes on, immigrants may likely adopt some of the host culture's health behaviours which may not promote physical health, such as smoking, alcohol or drug abuse, high fat, high sugar, and high caloric diet, etc. As I observed, I cannot deny that the similar behaviours are not happening among the study subjects of this research, however, for the reason that the participants are young, mostly in their early 20s, the negative effects of these unhealthy behaviours may not show up yet.

In addition to Chinese students' overall quality of life, this study also gave some insight into students' stress coping methods. According to previous studies, the main sources of stress among university/college students were study, worries about the future, financial difficulties, physical health problems, and interpersonal relationships. However, when it comes to international students, acculturation and challenges from the host society also post pressures on their shoulders. Therefore, an understanding of their coping methods/approaches is vital for establishing health promotion programs for international students. Participants from this study, both male and female students, reported that they chose avoidant coping strategies over active coping strategies. In the current study, avoidant coping strategies include playing video games, calling family and friends in China, going into isolation, using alcohol, losing temper, and other (sleeping, food and parties); active coping strategies include praying, studying, engaging in positive thinking, and doing exercise.

When examining the active coping strategies and avoidant coping strategies respectively, the result revealed that there was no difference in preferences of coping

strategies between the two genders. Even though a few more female Chinese students prefer avoidant coping strategies while more male Chinese students go for the active coping strategies, the difference is not obvious. However, when examining the coping approaches separately, I noticed that female students were more likely to deal with stress in a private way, such as call back to China, isolating themselves, and engaging in positive thinking. Approaches in coping with stress are influenced by ethnic and cultural background (Al-Dubai, Al-Naggar, Alshagga, & Rampal, 2011). I consider the Chinese female students' preference of coping approaches reflected that they still maintain the Chinese traditional gender values. As I mentioned, the traditional Chinese gender view sees women as family caregivers and expects them to stay home with the families; Chinese women, therefore, have a deeper connection with their families than males do. Simultaneously, since their roles are "inside the family" instead of "out of the family", Chinese women's social networks may be less sophisticated and smaller than men's. This point is supported by the previous finding of this study which indicated female students scored lower in social domain than male students. As a result, it is not surprising to see that Chinese female students turn to their families, engage in isolation, and other avoidant coping strategies when stress comes or problem emerges.

Practical Implications

The primary purpose of this study was to explore the acculturation and quality of life status of international students who come to Northern B.C. from mainland China. The findings bring a better understanding of these processes with regard to this population. Several implications will therefore be discussed in this section in order to help Chinese students complete their sojourn lives successfully and improve their quality of life.

Implications for educational settings. As greater numbers of Chinese students come to Northern B.C. to pursue educational opportunities, it is necessary for student counsellors to understand students' cultural background and acculturation process in order to provide valuable information in terms of culture adaptation, daily life integration and academic setting adjustment. In addition, counsellors should be aware of the gendered pressures Chinese women face in academic settings, and how these compare to their domestic counterparts. Only with such awareness will they be able to help students within the Canadian education system. Therefore, it may be important for schools to offer cultural background training to their counsellors and educators so that they are able to better serve the Chinese student population.

The following recommendations could be further generalized to all international students. In addition to student counselling, schools should also put effort into changing the academic perceptions to facilitate international students' acculturation process. Students who come from a conservative cultural background (e.g. Chinese and Japanese culture) usually prefer a more restrained and formal relationship with an older person or individual with higher status (Bradley, 2000). Therefore, international students tend to be reluctant to disclose the problems arising from academic study to their personal supervisor or class instructor since these roles are seen as authorities that should not be contacted casually in their cultures. Besides, since some academics in host schools actively keep students at "arm's length" distance personally and emotionally in order to pursue their other priorities, international students studying in foreign countries may feel marginalized during their acculturation in terms of schooling. The way to change this situation is to provide cultural awareness training to educators. Given that Canadian

society is a multicultural one, it may not be feasible to provide special cultural awareness training for specific cultures. Therefore, a general awareness of cultural difference is likely sufficient. Such training could be provided via teaching workshops or other staff development programs. Having the awareness of cultural differences in mind, educators should be able to adjust their teaching patterns according to international students' cultural assumptions which affect their interpersonal relations with others, especially with education authorities in this case.

When the discussion comes to how schooling affects international students' acculturation, another point worth pointing out is that school should provide a professional research environment for students. A better academic quality is one of the important factors that attract thousands of overseas students to relocate themselves in Canada every year (Alberts & Hazen, 2005). Therefore, host schools should provide as much support as possible to encourage international students to put effort toward academic achievements. Continuous scholarship, funding, or other forms of financial supports for international students should be valuable and encouraging.

Thirdly, host school can create a more comfortable and safe environment for international students by providing an expanded orientation regarding the adjustment to new culture. Various orientations are held at the beginning of every fall semester at UNBC and CNC, which generally introduce students to the school facilities and environment, program requirements, and criteria for completing degrees. However, the focus of these orientations may not be the most appropriate for international students who have just arrived in the new environment. According to my research, Chinese students have the lowest acculturation levels upon first entry into Northern B.C. As they are likely

experiencing radical changes in their life, the overwhelming new environment and language barriers make absorbing information at orientation very difficult. Schools may consider providing orientations in different languages to introduce the host culture, as well as the school system so that the international students can integrate in the new environment quickly.

In addition, mentorship programs or co-national peer support groups may be appropriate if schools decide that culturally tailored orientations are too costly and time consuming. Such programs would help new students learn and adapt to the new environment by assigning them to co-national international students who has been studying in Canada for a longer period of time. For newly arrived students, having co-national friends is helping to bridge the gap between their home culture and the new environment, allowing them a greater access to resources and reducing the period of culture shock.

According to the self-report stress coping methods in this study, over 40% of students turn to the methods which have no beneficial to students physical health to avoid stress, such as consume alcohol and play video games. School, as a major component of students' live, has responsibility to help students to establish a healthy lifestyle, for example, sports. Doing exercise was the second most popular coping method for stress among international students from this study. School-wide sports competitions could be one of the effective ways to help students cope with stress, adapt to the new culture and, at the same time, increase their life quality. Competitions could be held between programs, classes, or departments. It provides students with a good reason to start doing

exercise and learn more about their host culture. In addition, such competitions may act as a bridge to connect international students and domestic students.

Implications for international students. As Canada is a country with diverse cultures, international students may find it confusing whether or not they should adopt the Canadian culture or maintain their culture of origin because for some communities in urban areas (e.g. Vancouver, Toronto, etc), minority cultures, such as Chinese culture and Indian culture, are actually the dominant cultures. Immigrants who reside in those communities live comfortably and peacefully even though they do not speak English or follow the Canadian cultural norms. My suggestion on this point is to adopt what is needed and maintain what is important. First of all, it is obvious that the society would not properly function if the new comers do not follow the laws. For example, immigrants from some countries could go to see a specialist doctor directly when they have certain health problems, but in Canada, one can only see the specialist with family doctors' reference. If the new comers ignored this law and went to see the specialist without any references, how could our health care system run properly? Thus, it is important for international students/immigrants to obey the host country's laws even they are different from their home country. Secondly, it is important to respect and accept the cultural norms of the host country. Unlike laws, cultural norms are the rules which are not in a written form; but similar to law, cultural norms are the rules that keep our society running effectively and tie the whole nation together. One may not agree with all cultural norms from the host country due to disparities between their home culture and host culture, however, by accepting the unwritten norms and acting in an appropriate way, international students/immigrants would be guaranteed to live and work in host country at

ease. Thirdly, in the perspective of health behaviour, dietary patterns in most Asian countries include high consumption of vegetables and wheat and low consumption of high fat, high sugar, and high calories food; while the Canadian dietary pattern is more likely to consume foods high in fat, sugar and calories. I consider the Asian style dietary is more beneficial to people's physical health so I would recommend international students/immigrants with Asian cultural background persist in their dietary beliefs. Finally, I strongly suggest international students/immigrants do not completely abandon their home culture, because culture is what defines a person and where individuals can find a sense of belonging.

As Canada absorbs immigrants from all over the world, diverse ethnicities make Canadian society a pluralistic one. When international students adapt to this society, they are not only adapting to the mainstream European Western culture, but also cultures from other ethnicities, such as Japanese, Indian, Middle-East, etc. The reality of a multicultural environment may sometimes place stress on international students during acculturation since the disparities between cultural values, beliefs, and expectations are significant. In my opinion, students do not have to adopt all the norms, values and beliefs from other minority cultures, however, a proper understanding towards them would definitely bring no harm to international students' acculturation. Here are some suggestions for students to ease the stress from a multicultural environment. Firstly, try to understand and respect other cultures by attending courses related to culture issues. The international studies program, foreign language study, and the Economics program provide courses/trainings in such topics from time to time. After students gain some knowledge of other cultures, the second recommendation would be try to be part of the multicultural gatherings,

hangout with students from other ethnicities, or attend other cultures' traditional festivals. In a word, international students should build a good relationship with other ethnicities other than Caucasians in order to bridge the gaps between cultures, which assist to mitigate the acculturation stress from this pluralistic environment.

Even though international students are temporary residents in the host country, many of them see their temporary stay as a springboard towards permanent immigration. Some of them do not have a clear idea of whether to stay or return upon completion of degrees when they first arrive in the host country, however, after years of study or after-graduate work, they may change their mind and choose to become immigrants. Certainly, we cannot deny there is still a proportion of students who planed and will surely return to their home country after graduating from school.

Here are some suggested approaches to acculturation for students who plan to stay or return to their home country after graduation. According to a previous study, better quality of academic resources is a main factor that attracts international students to stay (Hazen & Albers, 2006). Students do not believe they would be better off professionally in their home countries because their home country is unable to provide as good an environment for academic research as the host country does, or the knowledge/techniques they learn from host schools cannot be applied in home country. Economics is another factor that keeps students staying in the host country after finishing school, especially the students from low-wage countries, such as China and India. Indeed, compared to these countries, Canada is a well-developed country with less competition; it should be easier to get a well-paid job in Canada than in these two countries. Therefore, I suggest students who plan to stay in the host country upon completion of school adapt to the host culture

entirely, from lifestyle, basic cultural norms to cultural values and beliefs. Attend as many career training or information sessions as possible to gain more insights in terms of the working pattern, interpersonal relationship in work place, unwritten rules in office operation and so on. In another word, students may not only need to adapt to the school life in the host country, but also accept the host cultural values as early as possible in order to build a solid psychological foundation for further challenges from work. In contrary, the approach could be a bit different for students who are going to return to their home country. Previous study indicated that societal and personal factors are the main factors that draw international students home upon completion of school (Alberts & Hazen, 2005). These students may consider the host country cannot provide a comfortable living or cultural environment as their home country does. Also, due to the attachment and obligation to their families who are still in the home country, they will eventually return. Thus, for this group of students, I think simply adapting to what could assist them successfully complete the degree in the host country will be sufficient, such as the basic cultural norms which help them behave properly in the host country; language competency which is essential for their study; and life style which complies with the host culture's expectation.

Implications for our community. This study found that social support is an important factor in improving Chinese students' quality of life. I have observed that there are three distinct Chinese immigrant social networks in Northern B.C.: the family based, the education based, and the student based. The first is mainly composed of families that immigrated to Canada some time ago. Members in this network usually know each other well and have a close daily connection. The second is mostly comprised of educators who

teach in Northern B.C. While they have generally spent less time in Canada than those in the first network, they usually possess a higher education level. The third is comprised of Chinese students currently studying in Northern B.C. Despite the fact that these groups share a common ethnicity, I see few connections between them that would be useful in forming a larger social support foundation. To facilitate greater interconnectedness among them, local multicultural service agencies could organize cultural events, such as traditional Chinese festivals. By attending parties or celebratory dinners open to all Chinese residents, students would gain opportunities to expand their social networks. Furthermore, multicultural agencies could regularly invite Chinese professionals from different domains to give lectures related to health, culture, and various other topics that interest the Chinese community. Such efforts would go far to tighten the social bonds between the existing networks and increase quality of life for students.

Regarding the non-Chinese community, more welcoming attitudes, understanding, and patience toward Chinese students would go a long way in easing cultural tensions. As a personal experience, I and others of Chinese origin have been treated with disrespect in restaurants simply because of our Asian appearance. Such unwelcoming attitudes toward Chinese students from their Caucasian counterparts are likely to create a negative view of the community and hamper student's efforts to acculturate. To facilitate better intercultural understanding and reduce prejudice, I would suggest service agencies could cooperate with schools to host multicultural cooperation and educational events.

Limitations

There are a few limitations worth mentioning in the present study. First of all, there are limitations in the study design. The thesis studied students from Mainland China as study subjects to examine their acculturation behaviour over time. However, the study design did not allow for controlling the time element in order to tease out the unique contribution of culture to the acculturation process. Additionally, as mentioned before, school is a vital factor that influences students' mental health, but the study design failed to control the effects of schooling on students stress level to separate the role of cultural problems in coping with the stress associated with adapting to the host environment.

The second limitation comes from the nature of cross-sectional study. Cross-sectional study is a type of descriptive and observational study involving the measurement of different variables in the population of interest at a single point in time (Hall, 2008). While this method is useful in uncovering associations between variables, its "snapshot" nature limits its powers in establishing causality. In the present study, the general lack of statistical support was the biggest limitation in explaining the results. A longitudinal study may provide a further insight to the results.

The third limitation is the nature of quantitative research methods. As the results are presented exclusively in numerical descriptions rather than detailed narratives, it is difficult to gain an accurate understanding of what the subjects are really going through, how they feel, and what their coping strategies are. This limitation may be addressed in future research by using qualitative research methods.

A final limitation is the likelihood of dishonesty in responses to the questionnaire. As a Chinese student studying at UNBC, I was acquainted with a portion of the participants before the research commenced. Despite the declaration of the confidentiality and anonymity in the consent form, these participants may have been afraid that their personal issues would be disclosed to others. They may have therefore underreported their issues to protect themselves.

Suggestions for Future Research

More research should be conducted on the issues facing international students in Northern B.C. While this region welcomes more and more international students to relocate, it has been largely neglected by the academic community. The present exploratory study suggests that the UCT model applies to international students from mainland China, but what about international students of other ethnicities? Further research in this region should also investigate the determinants of students' prolonged period of culture shock.

This study has chosen UCT as the conceptual framework because it fits my personal experiences in acculturation and it has been practically used in real life for years. Additionally, since UCT is easily represented in a visual and diagrammatic manner, I consider UCT as an effective and universal tool to explain the process of acculturation to the readers who possess no professional knowledge in the cross-cultural field and from various culture backgrounds. Studies, which also used it as a conceptual framework, supported the idea that time facilitated an individual's acculturation process (Ponizovsky et al., 2000; Wong-Rieger & Quintana, 1987); however, UCT fails to provide the

underlying reason why acculturation happens when individuals enter a new environment. According to the theory, international students would eventually acculturate to the host culture. It implies that the acculturation process and when its associated outcome shows up is just a matter of time. Indeed, as time proceeds and students' experience continuous exposure to the host culture, they receive and gain more and more knowledge about the new country through main stream media, social interaction with domestic residents, and schools. With the increased chances to observe and imitate modelling behaviours, students may change their behaviours to meet the society's expectations and norms. As period of residence becomes longer, students' changes are seen only be in their behaviours, but also in their attitudes. Some students may show changes in self-identity, cultural values, and religious beliefs. I call this is a knowledge acquisition-behavioural imitate-attitude change process.

The questionnaire used in this study only accessed Chinese students' general acculturation level within a given time period, it did not come to any conclusion regarding how the cultural factors and switch in personal cultural perceptions (e.g. self-identity, cultural values, or beliefs) affect international students' acculturation at this point. To explore this point, I suggest future researches recruit students with different cultural backgrounds and compare their acculturation process over the same time cycle. Furthermore, since the acculturation process involves knowledge learning and behavioural imitation, the Social Learning Theory, which emphasizes modelling and observational learning, should be appropriate for future research which concerns the relationship between a subject's length of stay in the host country and behaviour changes in terms of cultural adaptation. Finally, since students undergoing an acculturation

process demonstrate changes in attitude, it might be useful to conduct future research that examines the link between personal beliefs and behaviours by using the Theory of Planned Behaviour.

With regard to international students' mental health status, though this study revealed the link between students' quality of life and length of residence in Canada, as well as the differences in quality of life between two genders, it failed to prove the specific contribution of cultural challenges on students' stress level. Future studies which wish to gain insights into this problem should compare the stress levels of students and non-students with the same cultural background. It would help to identify the separate role of culture in dealing with acculturation stress and its impact on quality of life.

In addition, future studies should consider using alternative research methods. Qualitative studies may produce more detailed and in-depth information that can be useful in analysis and future decision making regarding international student affairs. As an alternative, a mixed method approach of qualitative and quantitative methods can provide both statistical results and in-depth information. Such results would provide a deeper understanding of Chinese students' experiences in acculturation and could be helpful in identifying key influential factors influencing quality of life.

Finally, there are a few factors that should be taken into account in similar studies. First, as internet social networks occupy an increasingly important position in young people's real world life, future studies should include this aspect when measuring social support. Second, future studies should investigate differences in student's levels of education, and their relationship to stresses in acculturation. Third, numerous studies

have found that ethnic self-identity is related to the acculturation process, but how is it related to quality of life? This is a worthy point to investigate.

Conclusion

This study indicates that acculturation and quality of life change with time for Mainland Chinese students in Northern B.C. In addition, their experiences of acculturation and quality of life differ based on gender. It is therefore important for counsellors, educators, and decision makers to consider length of residence, cultural background, and gender role expectations when discussing international students and trying to improve their quality of life. Indeed, support from the community is just as important as support from the host school. Northern communities must therefore develop greater empathy for Chinese students to create a friendlier environment before they can truly integrate into the culture and enjoy a good quality of life.

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r=&pattern=&stByVal=1&p1=1&p2=31&tabMode=dataTable&csid#F4](http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=0540002&paSe
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Appendix A

Glossary

Acculturation

Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups.

Mainland Chinese student

Mainland Chinese student refers to Chinese citizen, excluding those from Hong Kong, Macau, Taiwan and other areas, who are currently studying in Canada with a non-immigrant student entry document (study permit), and required to return to China on completion of his or her study.

Quality of life

The term quality of life is used to examine the general well-being of individuals or societies. It has been used in a wide range of contexts, including human development, healthcare, and politics, etc. Different from standard of living, measure of quality of life not only focuses on individual's financial status, but also concerns on the quality of living environment, physical and mental health, education, and social belonging and so on. Because the proposed study subject is international student, thus, the range of quality of life that about to study would be student's satisfaction with his or her academic study, social interactions, living environment and general well-being (physical and mental).

Appendix B**Acculturation and Quality of Life Experienced by Mainland Chinese Students in Northern B.C.**

Definitions:

UNBC – University of Northern British Columbia

CNC – College of New Caledonia

Part I

The following questions ask how you adapt to Canadian life. Please choose the answer that best describes you. If you are unsure about which response to give to a question, the first response you think of is often the best one.

1. Rate yourself on how much you believe in Chinese values (e.g., about education, work, family).
 - 1 – Not at all
 - 2 – Not much
 - 3 – Some
 - 4 – A lot
 - 5 – Very much

2. Rate yourself on how much you believe in Canadian (Western) values.
 - 1 – Not at all
 - 2 – Not much
 - 3 – Some
 - 4 – A lot
 - 5 – Very much

3. How often do you communicate with other Chinese in Canada?
 - 1 – Never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – All the time

4. How often do you communicate with non-Chinese in Canada?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

5. How would you rate your spoken English?

- 1 – Poor
- 2 – Fair
- 3 – Somewhat fluent
- 4 – Fluent
- 5 – Very fluent

6. How would you rate your written English?

- 1 – Poor
- 2 – Fair
- 3 – Good
- 4 – Very good
- 5 – Excellent

7. What is your movies/magazines preference?

- 1 – Chinese or other Asian-language only
- 2 – Chinese or other Asian-language mostly
- 3 – About equally Chinese/other Asian-language and English
- 4 – Mostly English-language
- 5 – English-language only

8. What is your music preference?

- 1 – Only Chinese or Asian music
- 2 – Mostly Chinese or Asian music

- 3 – About equally Chinese/Asian music and English music
 - 4 – Mostly English
 - 5 – English only
9. How would you rate your knowledge of the Canadian culture?
- 1 – Poor
 - 2 – Fair
 - 3 – Good
 - 4 – Very good
 - 5 – Excellent
10. How often do you have Chinese food (including cooking at home and eating at restaurant)?
- 1 – Never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
11. Who do you now associate with in the community?
- 1 – Almost exclusively Chinese, Chinese-Canadians, or Orientals
 - 2 – Mostly Chinese, Chinese-Canadians, or Orientals
 - 3 – About equally Chinese/Asian group and non-Asian groups
 - 4 – Mostly Caucasian, Blacks, Hispanics, or other non-Asian groups
 - 5 – Almost exclusively Caucasian, Blacks, Hispanics, or other non-Asian groups
12. How often do you experience interpersonal conflict when you interact with English speakers?
- 1 – Never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often

5 – Always

13. If a conflict occurs, how would you resolve it?

1 – Avoid it

2 – Find a third person to help

3 – Confront it in tactful(圆滑的) way

4 – Fight back

Part II

The following questions ask how you feel about your quality of life, including health, education, living environment and other areas of your life. Please choose the answer that best describes you. If you are unsure about which response to give to a question, the first response you think of is often the best one. Please think about your life **in the last four weeks** and then answer the questions.

1. How would you rate your quality of life in general?

1 – Poor

2 – Fair

3 – Good

4 – Very good

5 – Excellent

2. How much do you enjoy life in Canada?

1 – Not at all

2 – A little

3 – A moderate amount

4 – Very much

5 – A great deal

3. How often do you feel happy in Canada?

1 – Never

2 – Rarely

3 – Sometimes

- 4 – Often
 - 5 – All the time
4. Do you have enough money to meet your needs?
- 1 – Not at all
 - 2 – A little
 - 3 – A moderate amount
 - 4 – Very much
 - 5 – A great deal
5. How often do you feel stress because of your financial difficulties?
- 1 – Never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
6. Compared to the life in mainland China, how would you rate the commodity price in Canada?
- 1 – Absolutely higher
 - 2 – Somewhat higher
 - 3 – About the same
 - 4 – Somewhat lower
 - 5 – Absolutely lower
7. How well are you able to get around in Prince George?
- 1 – Poor
 - 2 – Fair
 - 3 – Good
 - 4 – Very good
 - 5 – Excellent

8. Compared to the life in mainland China, how would you rate the convenience of transportation in Prince George?
- 1 – Absolutely worse
 - 2 – Somewhat worse
 - 3 – About the same
 - 4 – Somewhat better
 - 5 – Absolutely better
9. How satisfied are you with your ability to perform your daily living activities?
- 1 – Very dissatisfied
 - 2 – Dissatisfied
 - 3 – Neither satisfied nor dissatisfied
 - 4 – Satisfied
 - 5 – Very satisfied
10. How well are you able to concentrate on your study?
- 1 – Not at all
 - 2 – Somewhat
 - 3 – Reasonably well
 - 4 – Very well
 - 5 – Extremely well
11. How satisfied are you with your capacity for study?
- 1 – Very dissatisfied
 - 2 – Dissatisfied
 - 3 – Neither satisfied nor dissatisfied
 - 4 – Satisfied
 - 5 – Very satisfied
12. How often do you feel anxiety about your academic performance?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

13. How often do you feel overworked (e.g. too much assignments, quizzes, mid-terms)?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

14. How satisfied are you with your personal relationships with others around you?

- 1 – Very dissatisfied
- 2 – Dissatisfied
- 3 – Neither satisfied nor dissatisfied
- 4 – Satisfied
- 5 – Very satisfied

15. How often do you feel being discriminated against because of your ethnicity (e.g. being mocked, excluded, or rejected)?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

16. How satisfied are you with the conditions of your living place?

- 1 – Very dissatisfied

- 2 – Dissatisfied
- 3 – Neither satisfied nor dissatisfied
- 4 – Satisfied
- 5 – Very satisfied

17. Compared to the life in Mainland China, how would you rate the living environment in Canada?

- 1 – Worse
- 2 – Somewhat worse
- 3 – About the same
- 4 – Somewhat better
- 5 – Better

18. How often do you have negative feelings such as blue mood, despair, anxiety, depression?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

19. How often do you feel lonely?

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

20. How often do you feel physical discomfort due to negative feelings (i.e. backaches, headaches, stomachaches)?

- 1 – Never

- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – All the time

21. How would you rate your physical health?

- 1 – Very good
- 2 – Good
- 3 – Fair
- 4 – Poor
- 5 – Very poor

22. How satisfied are you with your access to health services?

- 1 – Very dissatisfied
- 2 – Dissatisfied
- 3 – Neither satisfied nor dissatisfied
- 4 – Satisfied
- 5 – Very satisfied

23. What do you do to cope with your stress?

- 1 - Play computer games
- 2 - Phone my families or friends in China
- 3 - Watch Chinese movies
- 4 - Pray to God
- 5 - Close my door and cry
- 6 - Drink Alcohol
- 7 - Lose my temper at my roommates
- 8 - Study for my exams
- 10 - Engage in positive thinking
- 11 – Exercises
- 12 – Other _____

Part III

The following questions ask about your demographics.

1. What is your gender?
 - 1 – Male
 - 2 – Female

2. In what year you were born? _____

3. What is the level of education you are attending now?
 - 1 – English Language Study (ELS)
 - 2 – Undergraduate (exclude ESL and continuing study students in UNBC)
 - 3 – Graduate or higher level (graduate or PhD program in UNBC)

4. How long have you been living in Canada? _____

Thank you for your participation!

Appendix C**Information Letter and Research Consent on Acculturation and Quality of Life of Mainland Chinese Students in Northern B.C.**

Dear UNBC Students:

This letter is an invitation to participate in a research study. As a full-time MSc. Graduate student in the Department of Community Health Science at the University of Northern British Columbia, I am currently conducting research under the supervision of Professor Mamdouh Shubair on “Acculturation and Quality of Life of Mainland Chinese Students in Northern BC”. This study should be beneficial to Canada education institutes, mental health consultants and other organizations which aim at assisting international students.

Most international students experience culture shock when they study overseas. How well an international student can cope with the culture differences between their native country and the host country directly relates to his/her successes in academic performance and daily life. I would like to choose Mainland Chinese students as my study subjects because first, the cultural differences between China and Canada is somehow greater than that between other Western countries and Canada. The greater cultural distance induces more problems for Chinese student when adapting to Canadian culture. Second, the number of Mainland Chinese students who are studying in Prince George is increasing; more researches should focus on this growing group to ensure them complete their sojourn lives successfully.

This survey will involve a 40- item questionnaire. Please note that your participation is voluntary. All information you provide during the data collections will be completely anonymous. Your name will not be connected with the data. Only the researchers involved in this study will ever have access to the data and it will be kept in a secure place at the university for a period of two years, after which time it will be permanently deleted. Also, please note that there are no known risks associated with participating in this study. Once you participate, you can still withdraw from the study at any time with no consequence and any information collected from you will be deleted. The survey would take about 15 to 20 minutes and would be arranged at a time convenient to your schedule. If you would like to know the result of the research, please leave your contact information at the end of the consent form.

If you have any concerns or complaints regarding this study, you may contact the UNBC office of Research at 250-960-6735 or reb@unbc.ca or my supervisor, Dr. Shubair at 250-960-6331. If you need any support for the emotional responses that arise during the survey, you may contact the UNBC counseling services at 250-960-6369 or wellness@unbc.ca. Thank you very much for your consideration.

Sincerely,

Junming Liu (Contact me at jliu0@unbc.ca or 778-890-0688)

Appendix D**Research Participant Consent Form**

I have read the information presented in the information letter about a study being conducted by Junming Liu of Community Health Science Program at the University of Northern British Columbia, under the supervision of Professor Mamdouh Shubair. I have had an opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that excerpts from the survey may be included in the thesis or publications come from the research, with the understanding that quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics approval through, the UNBC Research Ethics Board. I was informed that if I have any complaints or concerns resulting from my participation in this study, I may contact the UNBC office of Research at 250-960-6735 or reb@unbc.ca. I was also informed that if I need any support for the emotional responses that arise during the survey, I may contact the UNBC counseling services at (250) 960-6369 or wellness@unbc.ca.

I agree, of my own free will, to participate in this study.

Yes _____ No _____

I have read and fully understood the information letter that provide with consent form.

Yes _____ No _____

I agree to the use of anonymous quotations in any thesis or publication that comes of this study.

Yes _____ No _____

I understand that I can refuse to participate or withdraw from the study at any time.

Yes _____ No _____

Participant Name: _____ (Printed Name)

Participant Signature: _____

Date of Participant's Signature: _____

I would like to learn about the findings of this study. Please call me or E-mail me at:

Best times to call are:

Appendix E**Research Advertisement**

CHINESE STUDENTS, JOIN US!

- As studying in a foreign country, do you feel that it is difficult to adapt to Canada's weather, lifestyle and learning environment? Do you feel that your social network is suddenly narrowed down because it is difficult to make friends here? Being thousands of miles away from home, do you miss your families and friends in China? In this unfamiliar country, do you frequently feel anxiety and panic? Please join our research; let us understand your dilemmas! Everything will be better!

来到异国他乡读书，是否感觉到难以适应加拿大的天气，生活习惯和学习环境呢？是否觉得很难交到知心朋友，社交圈子一下子变窄了呢？是否突然离家千里远，很挂念国内的亲人和朋友呢？在这个崭新的国度里，是否常会有不安，惊慌和不知所措的感觉呢？不要感到迷茫，这一切都会变好的。请加入我们的课题，让我们了解你的难处！

详情请联系